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A THRILLING
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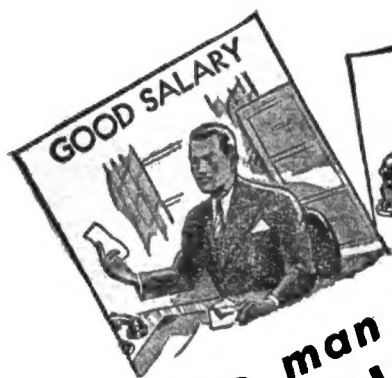
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December, 1948

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By MURRAY LEINSTER

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Cover Painting by Earle Bergey—Illustrating "Fruits of the Agathon"

Published every other month by STANDARD MAGAZINES, INC., 10 East 40th Street, New York 16, N. Y. N. L. Pines, President. Copyright, 1948, by Standard Magazines, Inc. Subscription (12 issues), \$3.00, single copies, 25c. Foreign and Canadian postage extra. Re-entered as second-class matter October 8, 1946, at the Post Office at New York, N. Y., under Act of March 3, 1879. Names of all characters used in stories and semi-fiction articles are fictitious. If the name of any living person or existing institution is used, it is a coincidence.

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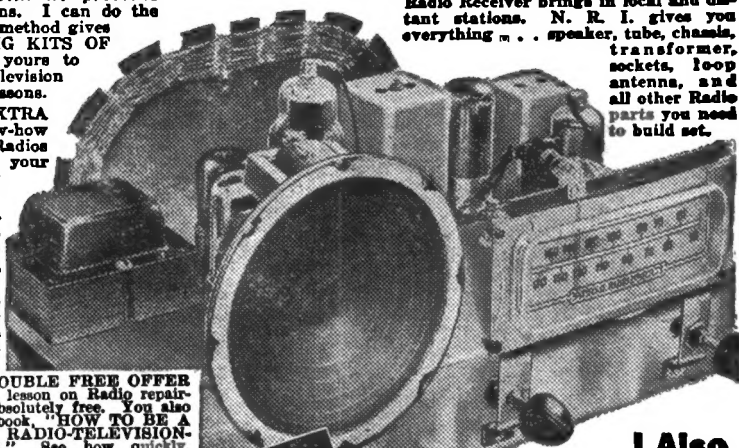
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A DEPARTMENT FOR SCIENCE FICTION FANS

IN THE course of holding down this definitely uneasy editorial chair for a number of years we have gradually come to be concerned anent the overwhelming preoccupation with dictatorship and its concomitant, uncontrolled power, which seems sorely to afflict even the most democratically inclined of our authors and readers.

We have, in the half-decade just past, received at least a thousand stories and perhaps twice as many letters in which some sort of local, national, global or galactic system of government was suggested. And it is a conservative estimate to say that at least ninety per cent of these planned societies have been based upon the principle of ultimate human power—in other words, no matter how they slice it, it's the same old bologna.

Alien invaders threaten subjugation of humanity—universal emperors are continually being toppled from their star-thrones—scientific technocracies, invariably dominated by “boards,” which in turn are dominated by some sort of a “director,” promote sterile Utopias—or gallant humanitarian “heroes” revolt against such setups to assume a benevolent autocracy themselves.

But no matter how they slice it. . . .

The Same Old Trap

One of the more amusing sidelights of this preoccupation with supreme power lies in the fact that many of the more articulate contributors to this column have assailed us for publishing such stories—and then, tackling the craft of fiction writing themselves, have almost invariably fallen into the same old elephant trap of thought clichés.

Thanks to the continual imminence of deadlines the editor of any magazine is to a

great extent in the power of his authors. He can beg, cajole, suggest, demand revision and return manuscripts unpurchased—but when presstime rolls around, as it inevitably must, he is compelled to prepare the best material he has on hand and, with a small prayer to Zoroaster, send it along to the printer.

When the bulk of his contributors go galloping off en masse on a single tangent, his magazine is bound to be a reflection of the fact.

Battling the Trend

We have been battling the trend toward fictional dictatorship for many a moon now—and we think with some success. The August TWS contained MR. ZYTZTZ GOES TO MARS by Noel Loomis, a novel about the curious reaction of the human mind to its own regulations in dealing with alien life, three novelets dealing with various human and “alien” foibles, as well as scientific devices, and five short stories of which only one, REGULATIONS by Murray Leinster, had to do with the human yen for vast power.

In the October issue Miss Leigh Brackett tackled the fanciful effects of a hyper-radioactivity upon Terrans and Venusians on the planet of the latter, the two novelets dealt with exploration of race memory and the effect of a general union of atoms on a small town and the short stories were, for the most part, clear of autocratic implications.

This issue, save for L. Ron Hubbard's 240,000 MILES STRAIGHT UP, which has a megalomaniac heavy, and the somewhat dim-bulb killer in Charles L. Harness' FRUITS OF THE AGATHON, who is a trifle on the paranoiac side, manages to keep clear

(Continued on page 8)

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THE READER SPEAKS

(Continued from page 6)

for the most part of this overdeveloped bump of pomposity. And while A. E. van Vogt, come THE WEAPON SHOPS OF ISHER in our February edition, does deal with the struggle for world power, he hardly does so in the old pseudo-heroic pattern.

In other words, we're continuing to search for something less hackneyed for our authors to slice.

An Ageless Preoccupation

We thought, for some time, that this preoccupation with power and the conspiratorial struggle for power was the result of the current world conflicts—with Francos, Trujillos, Stalins, Mussolinis, Hitlers, Perons and their mordant confreres providing the stimulus. Frankly, it scared us.

Then it occurred to us that this same preoccupation is ageless—going back through Plutarch to Xenophon and the chronicles of the ancient Persian court and doubtless beyond that to the still more ancient empires of China and Egypt. It doesn't require much reading of Plutarch to discover that this harried globe has always been overstaffed with people who look at life through distortion mirrors in which they see themselves as all-powerful demagogues of one sort or another—and usually through the noblest of motives.

The ideals of democracy and anarchy, thanks to their very decentralization of power, will never, we fear, offer visions as enticing. Not, at least, to any but the truly mature, of whom we have all too few.

And then we had another thought about our contributors' preoccupation with power. Perhaps it is a lot easier to write about a mythical organization with just one central character in the main focus. And perhaps, just as we who live in a republic either tend to venerate the titles of feudalism or to revile them with a highly suspect vehemence when given the opportunity, so we find glamour in the other chaps' pasture.

The Struggle for Power

Naturally, we are aware of the fact that much of science fiction should deal with the vast struggle for power which must, alas,

(Continued on page 10)



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THE READER SPEAKS

(Continued from page 8)

continue around us as long as material ambition is a part of the human credo.

But direct fictional dealing with such power in itself will never, we fear, be the basis of the so-called "classic," to say nothing of solid literary achievement in the science fiction field. Such work must approach the greater struggle, not through the small end of the telescope of future history but through its large lens—in short, the effect of this struggle, galactic or Terran, on the individual as an individual, not as a symbol of power himself.

Somewhat irrelevantly it occurs to us that it is this very approach which makes the work of Ray Bradbury so outstanding. He does not see the destruction of a world through the eyes of the man who presses the atomic button—but through the eyes and emotions of the castaway who witnesses the horror from the solitude of a far planet.

It is this truer perspective which we seek above all in our authors—and we believe that, in varying degree, we are getting it. We can't slice it often enough!

A DISAPPOINTING RESPONSE

WE HAVE repeatedly announced that this issue of TWS would run a listing of interested fan organizations like that in the July STARTLING STORIES. But the number of such groups that responded is so small that they need microscopic attention. They follow—

The Canadian Science Fiction Association. Available either to single or group applicants. Membership currently about 60. Address Publicity Chairman Greg Cranston, 184 Glen Road, Hamilton, Ontario.

The Cincinnati Fantasy Group. Secretary, Donald E. Ford, 129 Maple Avenue, Sharonville, Ohio. This outfit will be host at the big convention next September 3-4-5 and those wishing to have their names entered in the convention booklet will send one dollar membership fee to Mr. Ford.

Digamma Sigma Phi. A fan group in Hamilton, Ontario, with seven enthusiastic members and a "healthy" program, whatever that is. Secretary, Greg Cranston, 184 Glen Road, Hamilton, Ontario.


Outlanders Society. Informal group in Los Angeles area. Contact Rick Sneary, 2962 Santa Ana Street, South Gate, California.

Queens Science Fiction League. Will Sykora, head man. P. O. Box No. 4, Steinway Station, Queens, Long Island, New York.

Young Fandom. Tries to help young fans. Dues 50c per year. President, Harley Sachs, 208½ South Michigan Street, South Bend 11, Indiana.

We are grateful to the above entrants and wish them luck and all good things. But un-

(Continued on page 151)



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Founder of Egypt's
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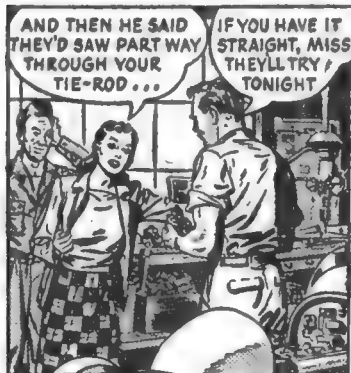
(AMORC)

CALIFORNIA

DOUBLE VICTORY FOR DOUG...

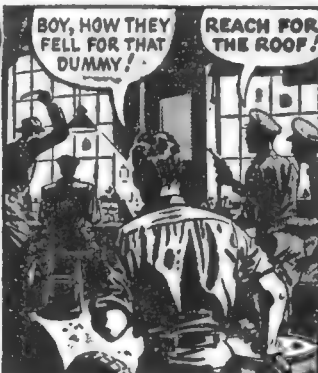


DOUG DANIELS, MIDGET RACE DRIVER, IS MAKING FINAL ADJUSTMENTS ON HIS LATEST MODEL WITH WHICH HE HOPES TO WIN TOMORROW'S \$5,000 HANDICAP, WHEN...



AND THEN HE SAID THEY'D SAW PART WAY THROUGH YOUR TIE-ROD...

IF YOU HAVE IT STRAIGHT, MISS, THEY'LL TRY TONIGHT



BOY, HOW THEY FELL FOR THAT DUMMY!

REACH FOR THE ROOF!



YAAAY! HE WON! HE WON!

WITH YOUR HELP, SIS

NEXT DAY



WHY YOU DIDN'T TELL ME YESTERDAY YOU WERE JIM RAND'S SISTER

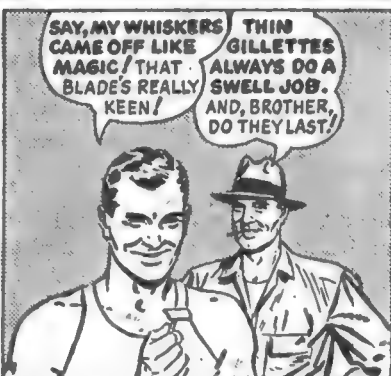
COME ON, SIS. WE'LL SEE YOU AT THE CLUB, DOUG

I WAS TOO EXCITED



I HAVEN'T HAD A CHANCE TO SHAVE IN TWO DAYS

USE MY RAZOR IF YOU WANT



SAY, MY WHISKERS CAME OFF LIKE MAGIC! THAT BLADE'S REALLY KEEN!

THIN GILLETTES ALWAYS DO A SWELL JOB. AND, BROTHER, DO THEY LAST!



SIS AND I ARE SAILING IN THE NEW YORK TO NASSAU RACE, HOW ABOUT COMING ALONG AS BALLAST?

BALLAST! YOU'RE TALKING TO AN EX-BOSUN!

H-M-M... GOOD LOOKING

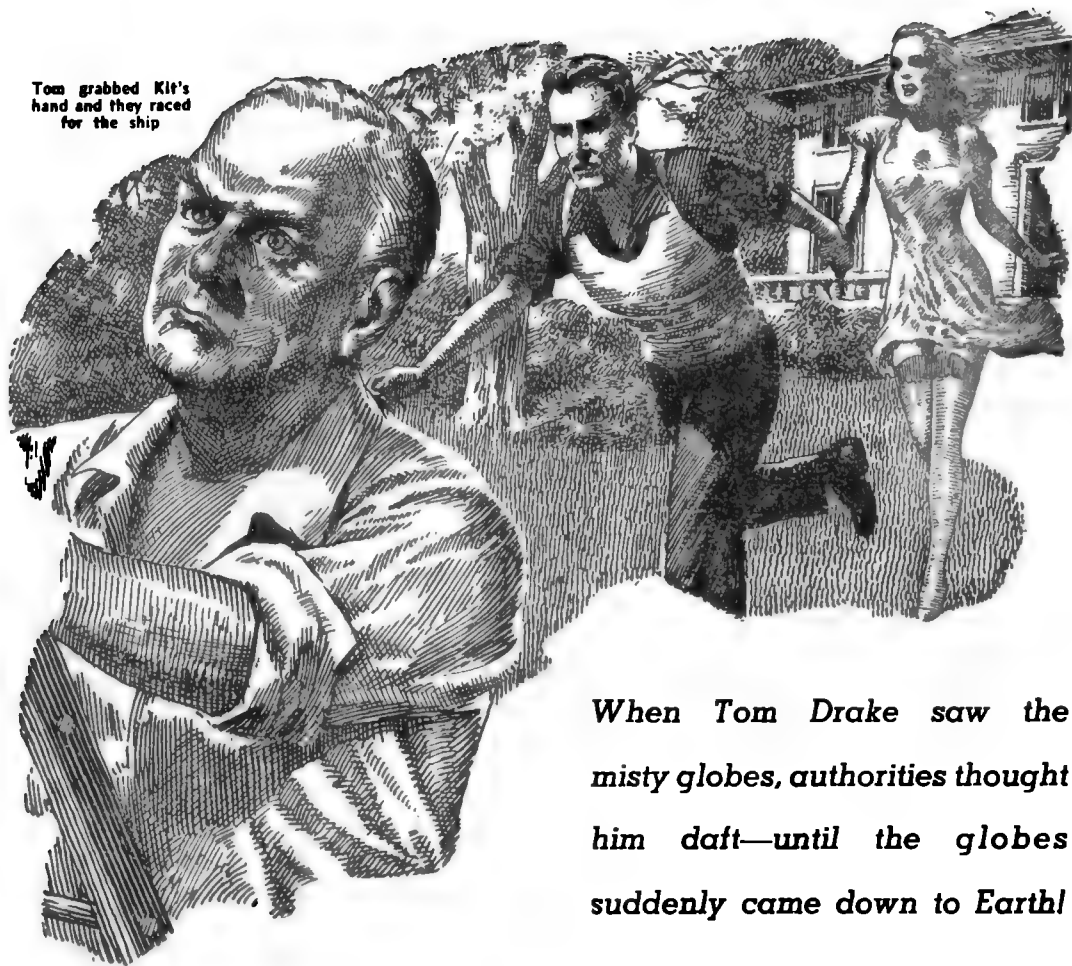
FOR SPEEDY, GOOD-LOOKING SHAVES AT A SAVING, TRY THIN GILLETTES. AMONG ALL LOW-PRICED BLADES, THEY'RE BY FAR THE KEENEST AND LONGEST-LASTING. ALSO, THIN GILLETTES FIT YOUR GILLETTE RAZOR EXACTLY... PROTECT YOUR FACE FROM NICKS AND IRRITATION. ASK FOR THIN GILLETTES IN THE CONVENIENT NEW TEN-BLADE PACKAGE

THIN Gillette BLADES

10-25¢ 4-10¢

New ten-blade package has compartment for used blades.

Tom grabbed Kit's
hand and they raced
for the ship



When Tom Drake saw the
misty globes, authorities thought
him daft—until the globes
suddenly came down to Earth!

THE GHOST PLANET

CHAPTER I

Solar Newcomer

TOM DRAKE was the first human being who is known to have come in contact with the inhabitants of the Ghost Planet. At the time the Ghost Planet wasn't even a name. It was undreamed of.

More, Tom had to admit that he neither saw nor heard nor felt the creatures whose existence he reported. The instruments of the *Weddington* had recorded absolutely

nothing out of the ordinary. So, on his arrival at Earth, Tom was politely fired from the staff of the Blair Memorial Expedition to Titan and found his affairs in a parlous state.

The encounter itself almost justified that action. The *Weddington* was the emergency craft left on Titan with the observing members of the expedition. After eleven months of routine observations temperaments clashed, crotchets developed and lunacy impended. So the *Weddington* was sent back

to earth for mail, reading-matter and visitor-records to save the situation.

Because of her size, only two men were required to man her. One was Tom Drake, who had no nerves and was the lowliest member of the expedition's staff—the other navigating member of the crew, was the most high-strung and nerve-racked of the whole force on Titan.

Four days out toward Earth he blew up with a loud report and had to take a hypnotic for twelve hours of restful slumber so he could continue to navigate the *Weddington*. The *Weddington's* course was close by Mars then and, while the navigator snored heavily in his bunk, Tom Drake took post in the control room and relaxed.

It was very lonely. The sun was a small round flame. The stars were many-colored unwinking specks of light. Tom Drake regarded the instruments which said that the little ship went on her course without incident. Mars was a dim red disk of pinhead size far off to the left.

The tiny ship went streaking through emptiness without any of the ghastly sounds her drive produced in atmosphere, leaving behind the thinnest and most tenuous of tails, which was created by the infinitesimal exhaust of ionized gases.

Later Tom was inclined to credit the whole thing to that tail. The *Weddington* was still accelerating and would do so for three days more, switching to deceleration well past Mars. Partial compensation for acceleration allowed of a high speed-gain rate.

Everything seemed utterly normal—depressingly so, in fact. The exploration of the other planets of the solar system had been disappointing. None would support a colony. There were observatories on Mars and Luna and Mercury, but the *Weddington* was alone in emptiness.

Tom thought regretfully of ancient dreams of interplanetary commerce and almost resentfully of the recent tendency not even to dream of interstellar journeyings.

And then he saw something odd.

It was a tiny speck of mistiness, perhaps half the size of the disk of Mars. It was almost in line with the red planet. And in interplanetary space there should be nothing misty save comets. Tom regarded it absently for a moment, then swung a telescope to bear.

It was a globular mass of unsubstantial reflecting stuff, like a puff of smoke in empti-

ness. Which, of course, was impossible. Also, this particular object was new. It hadn't been in sight in the neighborhood of Mars a little while since.

Presently it was larger and its angular distance from Mars had increased. Since it was on the side away from the sun and the *Weddington* sped sunward, that made him stare. He took a reading of the angle between the mist and the planet. Ten minutes later the mistiness had increased in size by several seconds of arc and the angle between it and Mars had decreased again.

The logical inference would be that it was between the space-ship and the planet, that it was moving nearer to the space-ship and that it had just changed course. But that was preposterous! The thing had no substance! In the telescope he could see fourth magnitude stars through the very center of the mist.

HALF an hour after he first sighted it, it was on the sunward side of Mars and was larger still. Had it been a solid object he would have considered that it was accelerating at a terrific rate and speeding to intercept him.

But it was not solid! Not only could he see remote stars through it but, when he turned a radar-scanner on it, the instrument registered exactly nothing. There was not even a tiny meteorite in its center. There was nothing there except mistiness. But it continued to move and grow.

He went back to rouse the navigator but could get no response. Hypnogen tablets aren't habit forming, but they are powerful and the navigator was out cold. Tom returned to the control room and regarded the mistiness again.

As nearly as he could tell the mist was headed on a collision course and accelerating at four or five gravities. He cut off the *Weddington's* drive, so the little ship would merely drift on with her attained speed and without acceleration. That should make the misty globe pass on ahead.

But it changed course. From terrific acceleration, too, it began suddenly to decelerate. It would still meet the *Weddington* in space.

It was not solid. The whole business was unthinkable, but Tom sweated suddenly. He thought of all the wild imaginative tales that had been written about monsters of space. He used the gyros to swing the *Weddington*



Tom crawled back to the control seat while the ship gyrated unpredictably

about. He blasted recklessly at two gravities at right angles to his former course.

The mist swerved and continued to grow in size.

An hour after his first glimpse of it the misty sphere was very near indeed—so near that there could be no possible question that it meant to close with the *Weddington*. Tom Drake sweated profusely. He sent the small emergency-ship in crazy gyrations at all angles and all accelerations up to four.

The unsubstantial sphere followed each change of direction with precision. It matched his speed. It reached a point no more than a hundred yards away and kept that distance for long minutes through dozens of maneuverings.

It was a diaphanous globe of utter unsubstantiality. Stars could be seen through it clearly. Yet it seemed to Tom that some distant stars were dimmed a little more than others, as if the mistiness varied in thickness with an internal structure. He had a good opportunity to make these observations. The sphere was a good thousand feet in diameter and for minutes it clung close, no more than three hundred feet away. Then, suddenly, it closed in.

And nothing happened. Absolutely nothing. The *Weddington* was enclosed, was engulfed in the mist. But no alarm bell rang. No instrument showed the slightest change of registration. Indeed, staring out from within the substance of the globe, it was hard to detect any difference in the look of things. But the *Weddington* was unquestionably in the very center of the sphere of mist.

Tom Drake had an eerie feeling that he was being watched intently by sentient beings. He knew that from a little distance his ship would appear to be the center of a sharply edged, ball-shaped nimbus like the head of a comet. He knew that something was watching him. He sweated. But no instrument needle swerved from its peg, nothing happened and nothing happened and nothing happened.

Then the globe suddenly shifted. It was off to one side. It moved swiftly away. It headed back toward Mars at an incredible acceleration.

That was all. There was no damage to the *Weddington*. There was no registry on any instrument tape to corroborate Tom's impressions. But the memory was very vivid. Tom had the curious, unpleasant impression that he had been examined intently

by ghosts and then left behind when their curiosity was satisfied. It was not a nice feeling.

When his navigator woke he told him about the visitation. The navigator was annoyed. Tom's tale was nonsense. The *Weddington*, though, was off-course and that was a serious matter. He returned her to her proper line and speed and fretfully reproved Tom for his absurdity.

In time he made report to the trustees of the Blair Memorial Fund. Tom was questioned. He told his tale frankly, then indignantly, then resentfully as he was disbelieved. When he was informed that his contract with the expedition was canceled he was enraged. He was practically thrown out.

He was, in fact, not only given the heave-ho but classified as an unstable personality, which would not help in getting further employment—and that was a serious matter, those days. Times were not good on Earth.

The population of the planet had increased to the point where merely living was a problem. Tom Drake nearly starved—because he'd encountered the inhabitants of the Ghost Planet before the Ghost Planet was known to exist. His friend Lan Hardy took him in while he hunted for a job.

Then, three months later, the Ghost Planet appeared in the Solar System.

CHAPTER II

Non-Material Invasion

WHEN the Ghost Planet appeared on the far side of Neptune, of course, nobody on Earth thought it meant anything at all. The first news releases said only that a new comet had been discovered. It was coming in at a surprisingly high velocity and it had developed a head at an extraordinary distance from the sun.

It had no tail, as yet, but one was expected to form. A comet's head and tail, of course, are simply ionized gases of almost infinite thinness, driven out and away from the sun by light pressure.

Tom's friend Lan Hardy saw the news releases, mentioned them to Tom and forgot them. He was pulling wires desperately to get some sort of Guild rating that would justify Kit McGuire in marrying him. Her

father had been World President and at the moment was in disgrace because he hadn't been able to stave off an inevitable economic depression.

But Lan shared his apartment with Tom and confided all his amorous dreams to him and after Tom found a job doing electronic design for a very small manufacturer he stayed on with Lan because living quarters were hard to come by.

Tom dug doggedly into books and found nothing that would explain his experience between Mars and Earth and ultimately had to work out a theory of his own. And then, without any real hope of ever putting his ideas to use, he began to work out possible devices which would prove or disprove his notion.

Even he, though, didn't connect the Ghost Planet with what he'd seen. At first it was called simply a new comet which had developed a head unusually far from the sun and so far had no tail. Besides, there was not much time given to it on the newscasts.

Even when the astronomers mentioned that its course—they said orbit—was a mathematically straight line headed accurately for the Sun, there was too much other news on the vision screens for anybody to pay attention.

There was a scandal involving a prominent vision screen actor. Two of the biggest Guilds had locked horns and conflict between their respective members was in prospect. A new fashion swept the earth and every woman had to get an entirely new wardrobe.

Work rationing appeared likely in North America and a new orgiastic religion turned up in Africa and spread like wildfire with a twenty percent drop in industrial production as a consequence. Nobody paid any attention to the Ghost Planet except the astronomers at the government-supported observatories on Earth, Luna, Mars and Mercury.

Then Lan Hardy—trying to play politics for advancement—got into trouble with a Guildmaster and was suspended from all connection with Guild conducted industry. It became Tom's turn to provide the cash on which both of them lived for a while.

Then the astronomers reported that the Ghost Planet—which they still called a comet—had no detectable mass and was completely unaffected by the mass of Neptune, which should have changed its line.

They added that their spectroscopes

showed no sign of ionization of the gaseous mass they then considered the Ghost Planet to be and they expressed amazement at its almost perfectly globular shape. And then they observed that it had a regular diurnal rotation, proved by the Doppler-effect difference between the light of opposite limbs.

Still there was no public interest. A mutation in soil bacteria in Western Europe threatened the fertility of ten percent of the world's tillable soil. Chicago won the World's Pennant. The world government administration which had taken over from Ex-President McGuire raised taxes all around and blamed his regime for the necessity.

The Seda Mountain ore deposit was officially declared exhausted. A new vision screen comedian shot up to the top of the popularity polls. The value of the prizes for naming "Mr. Sh-h-h-h" on a quiz program mounted to \$120,000.

And Lan Hardy was told that since he was suspended from his Guild—which was worse than expulsion, because he couldn't even try to join another—his quarters in a Guild-owned building had to be vacated. So he and Tom had nowhere to live.

Their personal dilemma bothered nobody but themselves. Even their friends joined the rest of the world in absorbed attention to the prospects and games of the Inter-hemisphere Polo Games, with the usual rumors of fixing, bribery and deliberate injury of players.

In the week before Lan and Tom were to be evicted, while they sought vainly for other lodging, Australia came from far behind and classified for the finals against the Hungarian five. Ex-President McGuire forwarded to Earth Government a heavily worded statement which those then in office unanimously ignored.

An atomic-energy plant in Patagonia flared blue and was automatically dumped into the pool of cadmium its flaring had melted. There was a prison break in Montreal. There was an airways accident on the Honolulu run.

NOBODY thought about the Ghost Planet, now a flaring globe of unsubstantiality some thirty-two thousand miles in diameter, heading in past Mars.

Then there came the night of the final Interhemisphere polo game. Tom and Lan saw it on the vision screen from the lodging they were so soon to vacate. They were

watching keenly with the feeling of absolute presence. They saw the multiple-balconied stands about the field, the black and cloudy sky overhead and the playing field itself in its glare of invisible, non-glaring lights.

And in the second chukker, as there was a tumultuous rush of men and horses after a racing ball, something thin and pallidly glowing and a thousand feet through seemed to settle down above the lighted field. It was barely visible on the vision screen until the roaring of the crowd changed to panicky shrillness.

Then the sports announcer said crisply, "Something queer in the air. It's barely visible. I'm changing the contrast."

The seeming soft lighting became harsh and hard and the vision-camera swung upward and the photographic quality of the lens grew hard indeed. Grainings appeared even in the night clouds overhead. Then the vision grew clearer.

It was a round globe of mist, almost motionless in mid-air over the polo field. It was not substantial. When a search beam struck it the light went right through but, in puncturing, it seemed to disclose structure inside.

And the internal details, misty as they were, were not the random swirling patterns of mist but very specific lines and masses and angles which were convincingly artificial. It looked very familiar to Tom.

A rocket soared upward from the stands. It had been placed to announce the victors of the polo game. It spurted through the wraithlike phenomenon unhindered and burst through in a spray of blue lights above it. Those lights drifted down through the wraith and reiterated the look of artificiality about its inner changes of thickness. They went out.

The globe did not stir, though search beams showed the smoke trail of the rocket blowing sidewise through it. Had it been solid or real it might have looked like an alien space-ship, a spectral space-ship, curiously watching the polo game below. But it was not real. A private plane, joy-riding overhead, made an hilarious lunatic dive at the apparition, flew through it, flew through it again and nothing happened.

Presently, in its own good time, exactly as if it had lingered until its curiosity was satisfied, the misty globe rose and vanished in the darkness overhead. It acted exactly as if living beings in it had become bored or

annoyed and had gone away. It was remarkably like the way that other misty thing had acted about the *Weddington* three months before.

"Now, what on earth was that?" demanded Lan, blankly.

Tom Drake smoked furiously and said nothing. Within minutes, the muted beep-beeping call of a special news bulletin broke into the restored but disorganized viewcast of the polo game. Lan Hardy switched to the newscast channel.

"A special broadcast of comments on the apparition at the Interhemispheric polo game ten minutes ago," snapped an announcer's voice crisply.

The face of a famous scientist peered out of the screen.

"I was watching the game," he observed. "Until the recorded telecast can be examined in detail, I can say only that it appears to be a very curious meteorological phenomenon. Akin, perhaps, to radar-ghosts, which are well-known and still not fully explained."

His face vanished. An eminent physicist took over.

"Very quaint. I would suggest a projected image of some sort, thrown into emptiness by practical jokers, except that it reflected light thrown upon it. That suggests that it was material. On the other hand no material substance known can be penetrated by other material substances without some disturbance of the penetrated substance."

His face disappeared. The world's best-publicized vision comedian appeared.

"My head felt that big this morning," said the comedian and hiccupped in his inimitable fashion. Undoubtedly, it evoked gales of laughter from his faithful fans. "I wondered what happened to my hangover. It went to the polo game!"

He leered in his equally famous manner, and his face faded.

OTHER faces and other voices. The special-events vision department dragged in all the big names that could be reached within the spot news time limit. Some hedged. Some tried feebly to wise crack. Some uttered profound nothings. It was the standard sopping-up process designed to get the maximum out of any news event that went on the air-waves. Lan Hardy scowled.

"But what was it?" he demanded again. "This is just junk we're getting!"

The screen flickered again and there was

ex-World-President McGuire looking heavy-lidded out of the screen. He spoke with deliberate energy.

"I happen to know what the apparition was. I have had private reports. Similar phenomena have been reported on Mars, Luna and Mercury. Moreover, the survey-ship Arcturis passed close to the reported new comet on its way back from Jupiter. Copies of photographs taken of the appearance were sent me by personal friends.

"The appearance over the polo-field was similar in kind to the new comet. It came from the new comet. Two photographs of the comet show such globes as we have just seen, arriving at and departing from the so-called comet.

"I have informed the World Government of those facts. The Government will doubtless issue a communication on the nature of the so-called comet and such globular artifacts as the vision-screen just showed us."

His voice ceased. The screen went blank. A smooth anonymous voice said, "This concludes the special-events broadcast about the appearance at the Interhemispheric polo match. Further details will be included in special feature broadcasts at the regular hours."

Tom Drake said slowly, "Globular artifacts."

"Crazy, eh?" said Lan brightly. "He's a fairly decent sort when you know him though. Kit likes him, even though he's her father. Fairly decent to me, too."

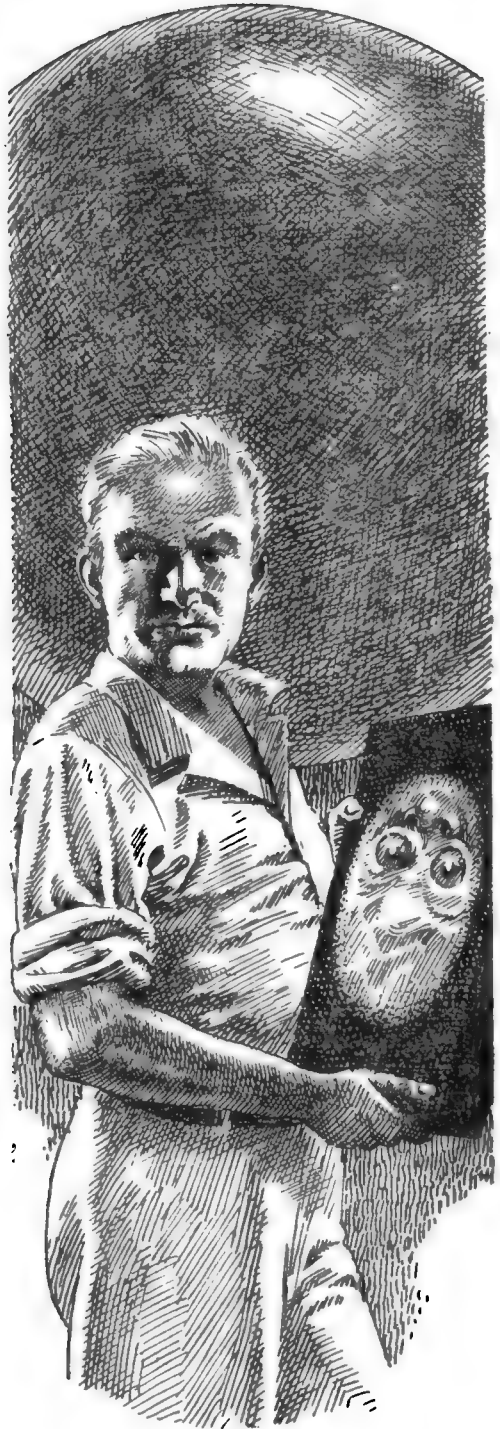
"I wonder what he heard from his private reports," said Tom. "I'd like to talk to him. I'd like to see those reports. I wonder if we could query it?"

Lan shrugged. Tom punched the dials on the vision screen and a newsfile clerk looked impersonally out of the screen.

"What's the data on this new comet?" asked Tom, frowning. "The one McGuire just mentioned?"

"I do not recognize the reference," said the newsfile clerk detachedly, "but the new comet file will be projected for you."

There was a click and the typed record of newscasts appeared on the screen. Tom read absorbedly. Orbit . . . mass zero . . . diurnal rotation . . . un-ionized gases. . . As he read the pulsing blue glow of a personal communication call appeared on the screen under the file image. He threw the switch to take the call. The newsfile faded.



The non-human countenance faded from the vision screen

Kit McGuire looked appealingly out of the screen.

"Oh, Tom! How-do! Do you know how I can locate Lan? My father wants him to come out here—"

"He's right in this room," said Tom.

"Thanks. Lan—can you come out to the Coast at once? Father wants some specialists. It's that new comet business. I told him you'd come and might find another good man or two for him."

"I'll take the next plane," said Lan, beaming. "I'm being evicted anyhow. But about someone to bring along—"

"Me," said Tom briefly from the background, "if I'll do."

"Sure!" said Lan. "I'll bring Tom. We're practically on the way!"

Kit smiled at Lan. Fondly, almost tenderly. But her forehead was creased a little with worry.

Tom said, "What's up?"

"Father," said Kit, "made the mistake of calling the Government's attention to the new comet. So they're ignoring it just because he mentioned it. And—it's stopped."

Lan feasted his eyes upon her.

Tom said sharply, "What's that?"

"It's stopped," Kit repeated. "It was headed straight in for the sun. And it's stopped. It's standing still out in space between Earth's orbit and Mars."

"Oh, it couldn't do that!" protested Lan. "It simply couldn't! Heavenly bodies can't stand still!"

"This one does," insisted Kit.

"Then what's up?" asked Lan. "Are we to get it started again?"

He grinned and Kit smiled in return. But she looked directly out of the screen at Tom Drake.

"Father says it isn't a comet," she told Tom. "He says it's a planet. A ghost planet. And somebody has to find out what it wants."

Tom jumped. The term "ghost planet" was something to make him sit up. It suggested—many things. Tom didn't happen to agree with Kit's father politically, but he did respect the older man's brains. And this meant something! His own brain went into high gear.

While Lan filled out the call from Kit with zestful, romantic conversation, Tom Drake put together the things he knew and some things he wouldn't have guessed without that "ghost planet" phrase. They added

up to a brand-new concept which was upsetting.

He was packing his own possessions for travel when the call ended and Lan came in, smiling sentimentally.

"Funny, eh?" said Lan comfortably. "Kit's actually worried!"

"So am I," said Tom. "It didn't occur to me before but now I begin to see things. I saw one of those globes three months and more ago, out by Mars. I couldn't make myself believe what it pointed to. It was a scout. You see?"

"Looking over our solar system for whatever it wants. And it must've gotten an idea that what it wants is here and—well—the planet followed it. It was a ghost space-ship from a ghost planet and it didn't come here for fun. What would ghosts living on a ghost planet and running ghost space-ships be wanting of Earth, Lan? Whatever it is I'd hate to have them find it!"

CHAPTER III

Go West, Young Men

THEY left New York on the midnight plane and four hours later they stepped off at the landing field at Pasadena. Ten minutes of shuttling and they came above-ground at the very edge of the solidly built city. Kit waved to them from her father's groundcar. It was still midnight by clock time.

The groundcar drew up beside them on its two wheels. They entered and it went hissing softly out to the openness beyond the city's limits. One had to be rich to live outside a city these days.

The Guilds had taken over the functions of insurance organizations, lodges and unions all in one, and building was now so costly that only a rich man could own an individual dwelling on an individual plot of ground. The Guilds themselves owned a good half of all the dwelling units in America. So people looked envious as the groundcar sped out on an arrow-straight road toward darkness.

It was almost the only private car in view. There was traffic but it was gigantic ten and twelve and twenty-wheel trucks and trailers. The groundcar dodged among them with needed agility and Kit spoke briefly as she

drove. She was accustomed to this sort of traffic. The pressure of existence on an overcrowded world had made private vehicles almost as rare as private houses.

"Quite a lot has happened since I called you," she said curtly. "Father spoke over the visioncast about the thing that appeared over the polo field tonight."

"We saw it," said Lan. He shifted his position to be closer to her on the upholstered seat.

"An hour later the Administration told the newscasters that Father's report had been received. Their only comment was that he seemed to be very ill! They were hinting that he was crazy!" She laughed angrily.

Lan Hardy said softly, "Was that why you wanted me to come, Kit?"

"I want you to help prove he isn't crazy!" snapped Kit. "Just because he's unpopular because he tried to be a good President, they're trying to get more popular by ridiculing him!"

Tom said meditatively, "Some people think he was not only honest but intelligent and that he had the right ideas as President. Naturally the politicians who replaced him don't like that!"

Kit turned to him eagerly. "You're for him, then? You think he was a good President?"

"I disagreed with him practically all the time," admitted Tom, "but I did think he had brains—just not the kind for that job. I'm much more interested in—"

"I'm not interested in your interests then," said Kit icily. She turned warmly to Lan. "Lan, the problem for you to work on is a way to prove that the Ghost Planet and those globes are what my father says and that they're dangerous and something has to be done about them!"

Lan put his arm along the back of the seat behind her. He talked soothingly in her ears. Tom sat in silence as the groundcar tore through the night. Presently he looked thoughtfully up at the stars. He watched them, continuing to piece things together.

Suddenly he said sharply, "Pull over to the side and stop the car, Kit!"

"Eh?" asked Lan, startled. "What's the matter?"

"Pull over and stop!" snapped Tom. "It's important!"

In silence, Kit swerved the vehicle and went onto the shoulder of the highway. She stopped. Tom spoke in a voice which

sounded a little odd even to himself.

"Turn off the lights. I mean it!"

Almost instinctively Kit obeyed. There was a temporary blackness all about. There was, right here, no other vehicle to pierce the darkness with its headlights or the silence with the sound of its motor. They saw only the stars and heard only the shrill stridulation of insects and the croaking of frogs in a nearby marsh. Then Tom pointed.

"Look there! Quick!"

Against the sky a gossamer, circular mistiness moved swiftly. It was lighted by the stars which shone through it. It was moving. It was perfectly round. Perhaps—*perhaps*—it glowed slightly. It rose in utter silence and moved swiftly against the wind. It dwindled in size and vanished.

"That one over the polo field on the other side of the world wasn't the only one on Earth tonight," said Tom grimly. "Did you see that, Lan?"

Lan said easily, "It was the tip of a searchbeam lighting the clouds, wasn't it, Tom? What of it?"

"That was a ghost globe," said Tom shortly. "Like the one that chased the *Weddington* and caught it. It's from the new comet. From the ghost planet. It's a ghost space-ship. There may be hundreds of them searching for something here on Earth."

"Come now, Tom," said Lan kindly. "A plane dived right through the thing over the polo field. It wasn't real. It couldn't be!"

"I didn't say it was real," said Tom briefly, "but it's actual. McGuire is right. I wonder what they're after?"

KIT started the groundcar again. It went on through the night. After half an hour she turned in a private driveway and drove on a mile or more to her father's house. She parked the car by a side entrance and led the way within.

Her father was in his study. It was an engineer's study, with a great commercial fine-grain vision screen at one end. McGuire himself, heavyset and prosaic as in the news-cast, sat regarding an image on the screen, shown with even greater perfection of detail than the news screens would portray.

It was undoubtedly an image sent from some technical service on a commercial wave band. The image was that of a field of stars, in the center of which a sphere of pale mistiness hung stationary. Stars shown behind it. Stars shone through it. The magnifica-

tion was so great that the slight oblateness of the wraithlike globe was visible. The image was almost a yard across.

He swung in his chair as they entered, nodded to Lan, acknowledged the introduction to Tom and waved his hand at the screen.

"It's stopped dead," he said heavily. "This image is from the Yerkes telescope. Six hours ago it began to decelerate at a rate of close to four gravities. It was going nearly two hundred miles a second—faster than any interplanetary space-ship we've ever made has built up to. In two hours it was down to a dead stop. And it's stayed stopped."

Lan said brightly, "Very interesting, sir."

"Smaller globes, like the one over the polo field, have been seen going to it and coming from it," McGuire added heavily, "but I can't seem to get any—"

"We saw another, sir," said Tom, "on the way here from town. And I saw one nearly three months ago, out near Mars."

McGuire swung in his chair. "Yes?"

Tom told the story of the *Weddington* and the ghost-ship. "When I was in the middle of it," he finished, "I had the feeling that I was being watched. But my report got me fired from the Titan Expedition as a lunatic."

McGuire asked crisp questions. Mostly they were technical ones, about acceleration of the ghost-ship and the like. McGuire had been an engineer, not a politician, before his election to the World Presidency and he was not thinking like a politician now. He was absorbed in a problem in whose importance he believed.

But Lan interrupted the questioning to say respectfully, "You can count on us to do any work you need done, Mr. McGuire. Have you anything in mind for us to do right away?"

McGuire looked at his daughter's fiancé detachedly. "I'm waiting for reports," he observed. "It was Kit's idea that you might be useful. Any suggestions?"

"No, sir," said Lan cheerfully. "Only that we get our luggage in from the car. I'll do that, sir."

He made a graceful exit, followed by Kit. Tom stayed uncomfortably where he stood. "I've got a rather crazy idea, sir," he said awkwardly. "It comes from a theory—"

A speaker unit spoke with startling clarity from the wall. "A number of mist-globes

are leaving the sunward side of the large sphere. They appear to be arranging themselves in a geometric pattern."

McGuire pressed a button and the image on the screen changed to an even more enlarged view of the ghost planet. Only a part of its edge was in view, now. And there was a distinct formation of tiny, almost transparent objects moving away from it.

There were dozens of them. They spread out in an expanding V and moved steadily across the star-speckled background. They looked like bits of thistledown in space. Stars shone right through them.

The speaker unit said crisply, "They are accelerating at four point two gravities. Their course appears to be toward Earth."

McGuire watched. Tom drew in his breath sharply. He reached forward and touched the screen.

"Look!" he said sharply. "If this Ghost Planet were solid—see? There'd be mountains here!"

There were small but distinct serrations at the edge of the almost transparent disk. The loudspeaker spoke again.

"This is the third such formation that has moved toward Earth in the past four hours."

"And the Administration says I'm crazy," said McGuire wryly. "Strictly speaking, it's none of my business. It should be left to official departments. But I was head of the government for awhile. I know better than to think the only duty of a private citizen is obedience!"

Then he reverted to Tom's comment. "Of course they're mountains. But they're mist. They're impalpable. They're imponderable. They're unreal! But if they were real—if a planet thirty-odd thousand miles in diameter moved into our solar system and its space-ships began to explore Earth in squadrons—then I think the Government wouldn't call me crazy!"

TOM said carefully, "There is—er—substance of this sort known?"

There was another booming voice from another room beyond McGuire's study.

"News bulletin! News bulletin! Two misty objects or apparitions like that seen over the interhemispheric polo match some hours ago have appeared over Honolulu! They are hovering over the city now!"

Kit appeared in the doorway, her hair a little disheveled. "Father! Did you hear that?"

McGuire got up and walked heavily out into the next room, where a standard broadcast vision receiver had interrupted a period of romantic music to bellow out the news. The technical screen in the study would remain on the observatory beam McGuire had arranged for. This was a news broadcast all the world would see. Lan Hardy got up hastily from a sofa. Tom observed that he looked annoyed.

The three men—McGuire, Tom and Lan—watched the news broadcast in silence while Kit looked from one to another of their faces. This vision cast was not as clear as that from the polo field. The misty globes were higher and not as well lighted, even though search-beams sought them out and followed them.

The two globes drifted over the city, stopped together, moved onward together, made systematic circlings as if inspecting everything below them with great care—and went off into the darkness.

"Well?" said McGuire when it was over. He spoke to Tom. It apparently did not occur to him to question Lan.

Tom hesitated. Then he said, "Look here, sir. We say things are real or unreal as we say they are red or green. But there isn't any absolute redness or greenness. Things are just more or less red or green.

"We recognize that redness and greenness are abstractions only. Maybe reality and unreality are more or less abstract ideas too. Maybe nothing is wholly real and nothing is absolutely unreal."

McGuire stared at Tom. Thoughtfully. "Mmmmm. Go on."

"Maybe there's no absolute reality," said Tom. "Just as there's no absolute red. And maybe there's no absolute unreality. There are some suns in the star catalogs that are known to have densities as low as the vacua in X-ray tubes.

"That's not matter in the ordinary sense of the word. Those suns glow, and they exist, but they're on the border of unreality. If this ghost planet and these globes are like that—"

McGuire looked at him in a curious mixture of approval and doubt.

"If they are—"

"If there's a type of matter on the borderline of reality, it might be matter on the borderline between our cosmos and another. Matter not wholly real in our universe, but not wholly unreal either. Possibly—well—

latent matter. Like latent energy. Like—say—trigger-energy or atomic energy.

"It would be real enough in its own universe. It would even have an infinitesimal, perhaps immeasurable mass in this. The point is that if this were a planet from a ghost sun, searching for something here—it wouldn't be here for the trip.

"And it would have some way either of turning into matter which was real here or of making our matter into its own kind. It's space-ships are spying on us. It must have a purpose. It could be—"

Tom hesitated. "Apparently its space-ships have been making public appearances to see if we have any weapon we can use against them. When they find we haven't—when they're sure—they'll probably begin to seize on whatever it is they want of us."

McGuire said practically, "And what would you guess that to be?"

Tom shrugged. "They could get any possible mineral matter from Mercury, and most organic materials from Venus. But there's no intelligent life except on Earth. Would they want intelligent creatures—in short, men? I don't know."

But as it happened Tom made that guess just eight hours before the first human being, in Cleveland, Ohio, was engulfed in a misty globe which came down from the sky and enclosed him—and then, before the eyes of his goggling fellow-humans, turned him into mist like the thing which had captured him.

CHAPTER IV

Political Implications

IT IS always dawn somewhere on Earth. Tom Drake saw the sun rise where he worked feverishly in the private laboratory attached to McGuire's house. McGuire had been an eminent engineer before he became the most unpopular president the World Government ever had.

He was a sound thinker even after he was retired to private life and became the Earth's most scorned private citizen. He was equipped to verify, with his own apparatus, any material and any calculation used in any type of engineering design he was likely to be concerned with.

Tom worked all night long till sunrise, putting together an unlikely small contrivance which—if it worked—would tell something about what the ghost globes were made of. If one could be contacted.

Meanwhile there was panic in Calcutta where a religious festival procession turned into stark terror-stricken flight when a ghost globe settled down in the middle of it. But the ghost globes were merely facts.

They rated with flying disks and other phenomena which at various times had been credibly reported by large numbers of people and then had ceased to be reported and been dropped into the limbo of forgotten things. The globes had been broadcast, to be sure, but nobody—except ex-President McGuire—had an explanation for them and nobody was willing to take his word for anything.

He'd become World President because the public was tired of professional politicians which were nothing else. He'd suffered the fate of all men less thick skinned than professional politicians. When, returned to private life, he tried to do a public service he was ignored.

Part of that ignoring took the form of playing up all other news items than the ghost globes and the ghost planet. A woman in Cairo had quintuplets. A London-Ottawa plane crashed on landing and a hundred and twenty persons were killed.

There was a school fire in Johannesburg, an unusually gory murder in Stockholm, a quaint "royal" wedding between members of formerly royal families in Central Europe, with ancient pomp and ceremony. There was a jurisdictional dispute between two Guilds which was threatening to throw two hundred thousand men out of work because of the question of the classification of four jobs in an atomic-power plant in Siberia and the regular run of sensational and merely idiotic news.

But one item made the morning newscasts about the globes. One of them settled upon the Smithsonian Museum main building in Washington. When the sun rose in the Eastern time zone the globe enclosed two-thirds of an antique building dating from the early twentieth century.

It was pale and thin and wraithlike but the morning sunlight showed it clearly. It looked rather like a balloon of sheerest gossamer except for those disturbing hints of internal structure.

For some reason unknown fire engines

were called out. They poured huge streams of water upon and into the wraith. The streams went right through the uncanny sphere. The buildings of the Smithsonian—not only the one englobed, but others nearby—got very, very wet. There was no other result that could be detected. When the globe got ready, in its own good time, it lifted from the drenched structure and vanished in the sky. That was all.

But that was at dawn on the Eastern coast. At that time Tom Drake worked obliviously in McGuire's laboratory. He did not even hear the spot news announcement. The dawn traveled westward and the cities woke in their turn. Buffalo woke, and Cleveland, and Detroit and Chicago.

The dawn went on toward the Rockies. It crossed them. And Tom, in Pasadena, blinked wearily at the new-risen sun in the Pacific time-zone when the globes took their first specific overt action against a human being.

It was in Cleveland at a quarter to nine, local time. The morning rush to work was in full swing. Away downtown, where Euclid Avenue runs into Lincoln Square, the sidewalks were crammed with workbound pedestrians. It was an extraordinarily bright and sunshiny morning for the city of Cleveland.

The air was utterly clear and the look of things was normal in every possible way. Hurrying, crowding people—stenographers, bookkeepers, minor executives—salesgirls, porters, typists, clerks. The sidewalks were crowded and the pavements between were jammed with traffic.

Even the walkways around the very ugly Lincoln Monument were filled with people using them as short cuts across the square. Everything was exactly as it had been ten thousand mornings before and could reasonably be expected to before ten thousand mornings after.

But suddenly, above the noise of feet on concrete walks and the sounds of traffic in the streets, there came a high shrill scream.

It was not a scream of pain but of terror. A man stood stock-still and shrieked. He was an absurd, pudgy, bespectacled man with a ridiculous mustache. He was later learned to be a certain Arthur V. Handmeter, a foreman in a factory making artificial flowers. He stood as if frozen on the sidewalk with his eyes wide and staring. He screamed and screamed and screamed.

OTHER figures shrank away from him, clearing a space and staring at him. There was absolutely nothing that they could see at first to account for the pudgy man's panic. He screamed again and again and a policeman shouldered through the crowd toward him.

Then the crowd noticed that his screams grew thinner. Standing there before them in a ten-foot cleared space, the little man's shrieking grew muted as if far away. His mouth was open and his body was rigid in a paralyzed horror. But his voice grew thinner.

Perhaps, at this time, some of those about him began to notice that the clarity of the morning air had faded a little. The sky was not quite so blue and the sunlight was dimmer. But they noticed first that his body began to grow translucent. His screams had only the volume of whispers then, but they were high pitched and penetrating.

The policemen tried to seize him. Then there was panic unutterable. The policeman's hand went through the arm of Mr. Arthur V. Handmetter as if it were smoke. The people about him fled in stark unreasoning terror, turning wide and horrified eyes behind them as they fled.

They saw Mr. Handmetter become more and more translucent and then become transparent—still making the faintest of shrill screams—and finally he faded into nothingness in the deep shadow which had fallen imperceptibly upon the square as he vanished.

When he had gone—then quite all of the square and blocks of Euclid Avenue itself and other blocks of other streets opening into the square became like madhouses. Those who had known only of something strange

occurring in the square and had been craning their necks saw more than they had bargained for.

They saw a great, thousand-foot globe acquire the seeming of substance, bit by bit. At the beginning it was so thin and so tenuous that none really saw it. But as the substance of Mr. Handmetter diminished the substance of the wraith increased.

It became misty even in the sunlight. It grew smoky. Partitions and floors appeared within it. Shapes moved, dimly seen through its spherical walls. It grew more and more opaque—and it was an alien Thing, not wholly real but certainly not imagined.

Then the wave of panic broke in the Square. Men fled from the shadow of the thing of smoke. And, like a flood of pure terror, others turned and fled until all downtown Cleveland became a bedlam of screaming, fleeing humanity.

It was a catastrophe of major proportions in dead and injured in the crush. But actually, nothing whatever had happened save that a mist globe had settled down in Lincoln Square, and one single human being—Mr. Handmetter—had turned slowly to mist as he screamed his horror and the mist globe increased in thickness as he vanished.

It was a thousand feet in diameter and it had, at the end, just as much of substantiality as a globe of smoke containing a hundred and fifty pounds of substance might have had.

But then it rose sedately from the square—the ugly Lincoln Monument withdrawing from its substance as the globe arose—and ascended swiftly and diminished to the size of a tennis ball, then to the size of a marble, then to a spot and a speck and a mote—and then vanished utterly.

[Turn page]

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STOMACH

JUMPY
NERVES



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Mr. Handmetter, of course, vanished with it.

Out near Pasadena Lan Hardy smiled brightly at Kit across the breakfast table. It was one hour later by actual time, and one hour earlier by local clocks. Tom came in from the lab, McGuire following him. They sat down at the table, Tom looked discouraged. McGuire drank his coffee without a word.

"Father," said Kit. "What do you think of that Cleveland affair?"

McGuire nodded at Tom.

"It knocked my ideas all out," said Tom. "I should've known it in advance, though. But now I know that what I was trying to make wouldn't work even in theory."

Lan said cheerily, "Why didn't you ask me to help, Tom?"

"I was doing it by ear," said Tom morosely. "Trying to work out a theory that would work by finding out what didn't."

McGuire said abruptly, "You had some good ideas, though."

"What were you trying to do?" asked Kit.

"Trying to make a ghost," said Tom, sourly. "That Cleveland business shows it can't be done without ghost material to swap. But it's perfectly obvious once you see it! I made a fool of myself!"

LAN HARDY attacked his breakfast with a hearty appetite. He smiled sentimentally at Kit from time to time.

"This young man," said McGuire, almost grimly, "has an idea that fits the pieces together better than anything else that's been suggested to my knowledge. There are stars which shine and are quite actual but with no greater densities than the vacuums in vision-screen tubes.

"They are matter as compared to the emptiness of interstellar space, but a star shouldn't exist with no greater density than that. There've always been mathematical difficulties in computing their constants. So Tom suggests that they're actually ghost stars—stars of which the planets will be ghosts like the one between Earth and Mars."

"That's the idea you sprang last night," said Lan, smiling. "A beautiful way to dodge a lot of problems."

McGuire looked detachedly at Lan. He said, "His suggestion is that there may be two parallel universes with one or more dimensions incommon. It's been postulated

before. Some oddities in electronic behavior call for more than three dimensions in the greater cosmos of which our cosmos is a part.

"Tom suggests that a sun in that other cosmos may, because of the dimensions common to both, be on the borderline of existence in this. Conversely, a solid sun in this universe may be a ghostly apparition in that.

"Like a cork floating on water. To a fish it is perceptible but hardly significant because it only touches the water and is not in it. The ghost planet and the ghost globes are detectable in this cosmos, because they touch it. They aren't real in it because they aren't in it. They're ghosts to us. And"—McGuire said abruptly—"that would mean that we are ghosts to them."

Lan said, "*Boo!*" laughing. He looked at Kit for admiration. She said impatiently, "But if they aren't real—that man in Cleveland—"

"The cork," said Tom, tiredly, "could become real to a fish if it tried to pull something out of the water. As it pulled something into the air some of it would be pulled into the water. They pulled a man into their cosmos. So some of their globe was pulled into ours."

"But—but—" Kit said uneasily. "Why'd they do it?"

"Tom's idea, and mine," said McGuire, "is to ask them, since the Government says I'm crazy. Tom encountered one of their globes three months ago near Mars. Maybe the ghost planet was on the way and that was an advance scout.

"Or maybe it was an exploring vessel and the ghost planet came when it reported a civilization here. Maybe it came to be a base for a really thorough examination of our solar system and our civilization for whatever it is that they want."

"But what is it?" demanded Kit.

Her father shrugged. "They haven't found it, certainly. Today they took that poor devil from Cleveland. Maybe they mean to ask him where it is."

"Took him—"

"Tom spent all night," said McGuire, "trying to work out a gadget to put some matter from this cosmos into that or into the borderline state at any rate. If we could do that we could communicate with them or, if necessary, even fight them."

Tom said gloomily, "But it can't be done—obviously. I see now. The amount of

energy and matter in any cosmos is fixed by definition. It can't be varied. So to put something from this cosmos into another, whether it's energy or matter, an exactly equivalent amount of matter must pass from that cosmos into this. It has to be—"

He stopped short, his mouth open as if in amazement.

"That's it!" He swung to McGuire. "Of course! Can you get hold of a space-ship? Any size! Anything! We can do it."

But Lan leaned forward gracefully. "Look, Tom. You're suggesting that by pulling a part of another cosmos into this, you can pull a part of this cosmos into that. You spoke of an analogy to pulling a cork down into water by making it pull a fish out of water. But don't you see that on an atomic or molecular scale such an arrangement would be unstable? They'd tend to pop back into their own space."

TOM shrugged. He was about to say that the ghost-ship had managed it in Cleveland.

But Lan went on gently, "Really, Tom, before you demand that Mr. McGuire get hold of space-ships and such things—don't you think you should—well—consider the facts? After all, Mr. McGuire has so much more experience than you have and is so much better qualified in every way, that—well—your theories are interesting enough—"

McGuire said sharply, "Your friend has some theories, at any rate. Have you any to offer?"

"Kit asked me to come here, sir," said Lan brightly, "to do technical work. Lab work. I've been ready to get to work at any instant, sir. But I wouldn't presume to make suggestions."

McGuire stared at him. Then he said shortly, "Let Kit brief you, then, and see if you can come up with some contributions to equal your friend's. This isn't a ceremony. It's an emergency, with a pack of politicians too busy thinking of politics to see what they're up against!"

Kit said eagerly, "You see, Lan, Father feels—"

"I know how I feel!" said McGuire angrily. "You're loyal, Kit, but I'm not thinking of the Ghost Planet as a matter with political implications! When there were different nations on earth there was a loyalty called patriotism. Now that there's a world

government, there's still room for a similar feeling!

"I think the Ghost Planet represents a possible danger. What happened in Cleveland just now is evidence for that view. But I'm sure that the Ghost Planet has the secret of the answer to the most desperate need of humanity.

"So as a private citizen I think it's up to me to try to find that out! I think it's up to Lan and Tom and everybody else! And if Lan will play less attention to the possibilities of being flatteringly respectful to me and try to suggest something useful I'll like it better!"

He strode angrily from the room. Lan flushed hotly and looked at Kit. "I'm not very popular with your father," he said resentfully.

"Don't be silly!" said Kit. "Because you're engaged to me you feel awkward with him. He won't bite you, Lan! Talk things over with Tom and work out something! That'll please him!"

"But it's ridiculous!" protested Lan. "There's bound to be organized research done! What can one or two or three people, working alone, do with problems that call for full scale planned investigation?"

Tom said nothing. He was at once very weary and very much absorbed in the new idea that had occurred to him.

"And he talks in riddles!" said Lan indignantly. "If it's a ghost planet with ghost space-ships why—he seems to agree with Tom that they can't do anything! And as for having a secret solving the most desperate need of humanity—"

Tom said abstractedly, "Interstellar travel, Lan. We've been to all our own planets and not one will support a colony. Earth's getting overcrowded. And our interplanetary drive wouldn't begin to reach even Proxima Centauri, even if we could live long enough to get there.

"The Ghost Planet came from beyond our system. They've a drive that will take a planet from one star to another. If we had it we could hunt out planets to colonize. There are plenty if we could reach them. And Earth would be a better place."

Kit said urgently, "There! That's it, Lan! Work out a drive that would serve for interstellar travel—after this affair is done with!"

Tom got up. "I've got to get back to work on a new angle. With a space-ship, even a little one, I think we could handle things."

The vision receiver was barking a news announcement as he left the room. The announcement was that a sphere was headed back toward the shimmering Ghost Planet—but "comet" was the word still used—and that it was much denser than any other that had been observed.

It was assumed to be the globe which had snatched a citizen from Lincoln Square in Cleveland and increased markedly in density while doing so. Moreover, several other extra-dense globes had risen from earth and were assumed to be heading back in the same direction.

At the very end of the news broadcast, an official announcement from the government public information service was read. It stated that Government scientists were actively investigating the comet and that the public should not be alarmed. There was absolutely no evidence—said the release—to support any idea that either the comet or the mist globes were hitherto unknown forms of life or that the globes were likely to prey on humanity.

The release was very comfortingly phrased, but it was a mistake. Few people, if any, had heard any rumor suggesting that the ghost globes were creatures which might eat men. The information release spread the suggestion on world wide newcasts. It sent a wave of hysteria around an overcrowded, overemotional earth.

CHAPTER V

Uproar

A HUNDRED years of peace and preventive medicine had sent Earth's population soaring. From two billion people in the early twentieth century it was now eight and a quarter billion. In a world-wide culture of high development there could be neither plagues nor wars to ease the pressure. But the pressure was enormous.

The Guilds arose to meet it—grim associations of individuals, at once unions and fraternal organizations, which watched jealously over the rights of their members and helped them by cooperative housing and merchandising activities to meet the increasingly desperate pressure of overcrowding.

But no organization could meet the actual situation, which was that of ancient China, static for two thousand years from the same insensate pressure of population. All Earth faced the prospect of a frantically struggling stasis with no hope because there could be no escape.

Men like McGuire saw the situation as desperate, and were howled down because they wanted to throw all the resources of the world behind an all-out attack on the means of emigration to the stars. It would be infinitely costly and taxes were already too high—demands for ever-greater government services were unending.

Even now the government regulated details of life that before had been strictly personal decisions. A vast straining electorate demanded the impossible and denied the only means for ultimate relief because they required immediate sacrifices.

An enormous emotionalism had developed, which was channeled by skilful political propaganda. But the tensions of merely securing a livelihood made Earth a place in which almost anything in the way of mass hysteria could happen at almost any instant, simply because ninety-nine percent of all human beings had been forced not to think beyond the stress of today and now.

So Tom Drake went back into McGuire's laboratory and worked and worked and worked. He had begun to think about the ghost spheres because he'd encountered one and it had caused him personal disaster.

When the Ghost Planet appeared, and Kit had called for the two of them—Lan and himself—to come out to the Coast for work on the problem it presented, he'd first thought of it as a matter of scientific interest.

But now that Lan's peevish indignation had made him realize what McGuire saw in the coming of the Ghost Planet, he worked with an enthusiasm which ignored the possibility of fatigue.

If the Ghost Planet had the secret of interstellar travel—and it must—then the problem was not that of meeting a danger, but of the whole future of humanity. As such, it was worth much more than all he could do. It was worth all that everybody in the world could do.

McGuire listened to his new plans. He nodded and vanished from the house. Tom racked his brains for remembered data and dug into McGuire's technical library for further information and then sweated over

the construction of a pilot model of a small device. He could go no further until McGuire turned up with something for which a larger device could be designed.

It was dusk and he was numb with mental and physical fatigue when the air throbbed heavily about the building. Then there was a deep moaning noise and the ground trembled—and then the whole disturbance stopped with a startling suddenness.

McGuire came into the laboratory. "I got—of all things—the *Weddington*," he reported. "The Titan Expedition sent it back again and asked to be relieved. They were seeing ghosts and the whole outfit solemnly decided it needed psychiatric treatment."

He grinned ironically. "They've sent off relief ships, which will *not* investigate the Ghost Planet, to bring back the whole crowd. And they started to liquidate the equipment. I got the *Weddington*."

"The ghosts were thousand-foot spheres?" asked Tom, tiredly.

McGuire nodded.

"I can handle it in a pinch," Tom told him. "The *Weddington*, that is. Take a look at what I've got here. It works as far as I can tell. It'll do to make a bigger one from. It's such old stuff I wasn't sure I could make a generator. But I did."

He showed McGuire the device. It was a trigger-energy field generator, a development from the electrets of ancient days which stored a bound charge of electricity in a mixture of waxes so that it could not be short circuited and could only be released by the melting of the electret wax.

The trigger-energy field stored latent energy in the molecules of any substance at all. Stored, it remained only latent until released by special conditions, when it usually appeared as heat. There was a time when there were great hopes of using it for metal-casting.

Sufficient latent energy for the melting of a billet of metal could be stored in the metal, and the metal remained cold and could be handled in any way as long as the latent—trigger—energy remained bound.

BUT when it was released the metal melted from its own stored trigger-energy. Inability to control the temperature the melted metal would reach had made it impractical for casting and it had never had an actual industrial application.

"The point is," Tom told McGuire, "that

borderline matter or stuff on the thin edge of being real can penetrate our matter without being disturbed. A plane flew through that globe over the polo field and nothing happened.

"But if the plane had been charged up with trigger-energy as its charged molecules encountered the uncharged molecules of ghost matter they'd have to discharge. The latent energy would go to the ghost matter molecules.

"But since energy can't leave this cosmos the ghost matter molecules would come into our space and become real—and since matter can only enter our cosmos if other matter leaves it the discharged molecules would go into the other cosmos.

"In other words I think a plane charged with trigger-energy flying into a globe would turn to ghost matter and an exactly equal amount of ghost-matter would turn real, atom for atom and molecule for molecule. Here's the math."

McGuire checked carefully, and then began to pace up and down the laboratory. "It looks right," he said. He said uneasily, "If the Government got hold of this, there'd be atomic bombs charged with trigger-energy. Dropped on the Ghost Planet they'd become that other kind of matter and explode there."

"Undoubtedly," said Tom, "They could do the same to us. We're ghosts to them as they're ghosts to us."

"I've got to think," said McGuire abruptly.

"I," admitted Tom, "could do with some sleep."

He went out, stumbling a little, and had to ask a servant where he was supposed to sleep. On the way he saw Lan and Kit. They were walking together in the garden and Lan was in the middle of some enthusiastic explanation.

He was immaculate and the sunlight glinted on his hair. He made a graceful gesture and put his hand on Kit's shoulder. She looked up at him and smiled and then saw Tom.

"How's it going, Tom?" She called eagerly.

"Got some stuff designed," said Tom and yawned. "Your father's working on it now."

He went on wearily to the quarters assigned to him and to Lan together. He saw himself in a mirror. His clothes were wilted and rumpled, his hair hopelessly uncombed. His eyes were red from strain and altogether

he was not a pretty sight. Compared to Lan— He surveyed himself for a moment.

"Oh, the heck with it!" he growled. He lay down and was instantly asleep.

The newscasters had a busy evening, while he slept. There were interviews with eyewitnesses of the Cleveland seizure of Arthur V. Handmatter and a broadcast of astronomical motion-pictures of the Ghost Planet. There were reenactments of a seizure or kidnapping in Chungking.

There were announcements by the heads of the official Government astronomical research project, who managed to put into their discussions of the "comet"—they carefully said nothing significant—plugs for more money for their staffs and equipment. Essentially, these officials said that the "comet" was simply gas in so attenuated a form that if it were condensed to the thickness of air at sea level on Earth it would all go into a two-quart bottle.

But there was a tight-beam vision cast from the Moon observatory which confirmed the fact that a steady stream of thousand-foot globes of mist moved from the "comet"—the Ghost Planet—to Earth and back again.

And it confirmed, too, the fact that seven returning globes were enormously more dense than any globes leaving the "comet" for Earth, as if they had somehow absorbed or eaten some substance on Earth.

Since at least two humans were known to have been carried away from large cities, it was reasonable to assume that five other isolated individuals might have been taken away without any eyewitnesses.

Then an eminent psychiatrist appeared on the screen and beamed at his audience, and jovially assured them that mass illusions were commonplace. He listed examples going all the way back to the sworn statements of crowds that they had seen witches riding on broomsticks.

He instanced a craze of flying disks, whose appearance was sworn to by wholly credible witnesses and he referred humorously to the craze of a few years before. Then a meteor shower had been interpreted as the arrival of a flight of space-ships from somewhere and for months afterward honest men and women reported seeing stilt-legged green men in various unlikely places. But all were illusions.

"Illusion is a form of catharsis," said the psychiatrist reassuringly. "We objectify our

fears. We picture them outside of ourselves and so consider that we get rid of them. I do not doubt that people in Chungking and Cleveland believe they saw everything they report. I merely say that mass suggestibility makes it possible for a large number of people to share a common illusion."

Human beings being what they are and psychiatry being a very obscure science, this vision cast tended to reassure everybody who did not stop to reflect that vision cast screens portrayed the globes and the Ghost Planet and that illusions which affect electronic devices are not illusions.

But the newscast went on to show one of the world's most glamorous actresses at a famous resort where she was honeymooning with her seventh husband. There was an appealing sequence of a small white dog lying on his master's grave with the explanation that he refused to leave it.

There was a picture of an important political figure leaving the World White House. A festival of flowers in Rio. The coming of the puffins to Greenland. A minor eruption of a volcano in the Galapagos.

IN SHORT the matter of the Ghost Planet was honestly presented as the big news feature of the day and then was deftly played down. Ex-President McGuire's broadcast of the night before, assuring the public that there was real information available about the Ghost Planet, was not referred to at all.

Kit was angered by that. She told Lan indignantly that her father's political enemies were refusing him a hearing for fear that the disclosure of his rightness and their wrongness would cause a political repercussion.

"Oh, of course," said Lan sagely. "My Guild was opposed to him, you know. I was suspended, really, because I'm engaged to you. That's why I can't get a job."

Kit regarded him with warm admiration for his martyrdom. "You'll show them!" she said vengefully. "When you show them what you can do."

Then Lan told her tenderly that she filled all his mind and it was hard to think of anything but her. But he did have the beginning of an idea for an interstellar drive. It would probably take some months of research to develop it and he could not put his whole mind on it while fearing that something might happen to break their engagement.

But then he began to picture the idyllic

situation which would arise if they were married even if it were an elopement—and he carried on his research with her to inspire him to brilliance. He did not mention the fact that, as he had no job, their support as well as the financing of his research would have to be at her father's charge.

That was left for Kit to resolve upon for herself. Lan grew lyrical about the genius which would come to him immediately they were married. It appeared that, in sheer dutifulness to her father, she should elope with Lan immediately.

When Tom awoke next morning, McGuire was grimly at work in his laboratory. The model trigger-energy field generator had been a necessary preliminary to later work, because trigger-energy had no regular practical use and few physicists had ever seen a generator of the field.

McGuire had studied it and spent the night in grim and somewhat clumsy labor upon a much larger one. When Tom examined it he realized that sound engineering had made up for lack of dexterity. This generator might be the largest that had ever been built and undoubtedly it would work.

"I asked your friend Lan to help me install this," said McGuire savagely, "and he explained very plausibly that Kit had asked him to go in to Pasadena with her and said regretfully that he would ask her to excuse him. He didn't have the least idea what this was!"

Tom said, "It's pretty old-fashioned, sir. I remembered it because I'm always digging in outdated textbooks. There's fascinating stuff in them. I suspect there are a lot of useful leads in forgotten facts that simply weren't followed up when they were first discovered."

McGuire grunted. "Nevertheless, your friend is simply planning a career as my son-in-law. That's all! Shall we install this on the ship?"

Tom postponed breakfast to get at it. Presently the two of them staggered out of the laboratory to the *Weddington* with their load. The little emergency-ship was small enough and clumsy enough and ugly enough to have no attraction for a wealthy amateur who wanted to do space flying for a thrill. That was why McGuire had been able to get hold of it. The job of the moment wasn't glamorous either.

There were some people—probably Lan among them—who would have been startled

to see a former chief executive of the World Government helping to carry out a weighty clumsy device and working with grunts and heavings to get it into place against an ungainly small ship's nose, then sweating as he worked a welder—sometimes he merely held the braces in place while Tom welded them—to fasten it on.

McGuire, sweat-streaked and dirty, was making the last electric connections when the ground-car came whizzing up the drive and stopped with a squealing of brakes. Kit was very pale. Lan looked at once uneasy and excited—but more uneasy.

"Something's happening in Pasadena," he said, and gulped. "There are four globes there. One of them's squatted over the General Hospital. There are three others linked to it. All four are getting denser by the minute. As if"—he gulped—"as if they were eating the people inside."

Kit got out of the car. Her knees wobbled.

"I—made Lan come back," she whispered. "They're—eating the people. Lan says so."

McGuire painstakingly climbed down the ladder. He threw it aside. Tom was in the act of wrenching open the entrance port of the *Weddington*. He climbed inside. McGuire followed. A deep droning noise sounded, so deep and so heavy that it seemed to shake the very ground. Then there sounded a throbbing noise and the *Weddington* moved straight up. But as it rose it headed toward Pasadena.

CHAPTER VI

Panic in Pasadena

THERE was ungodly panic in Pasadena. It was ten A. M., a time when shopping would hardly have begun and the industries of the cities should have emptied the streets of men. But as the *Weddington* came clumsily toward the city its ways were black with fleeing humanity.

For once the moving sidewalks were so crowded that passengers were edged off, reeling, into the throngs which fought to get on. Ground vehicles—trucks and commercial vehicles almost exclusively—blared and roared their sirens among crowds afoot which had overflowed into the vehicular ways. All of Pasadena struggled furiously to

get from where it was to somewhere else. Mostly, to be sure, men battled to reach their families and mothers ran desperately to the schools to relieve their children.

From aloft, it seemed that the streets simply boiled with black figures, eddying purposelessly, and that only relatively small streams of fugitives trickled from the streets at the edges of the city and fled for the open country.

The buildings of the city were unchanged. The tall block-shaped structures which alone were economical enough to build for rental to any but the rich stood serene. Untroubled small wisps of steam drifted from their tops in the morning sunlight.

But there was one oddity which accounted for everything that was strange among the people. Above a group of buildings set in green lawns an alien and frightening appearance hung. At first, from the *Weddington*, Tom Drake saw only the top three monstrous globes. They were smoky. They looked thick. But they did not yet look solid.

Touching each other as the upper part of a colossal inverted pyramid, they also touched a fourth globe which touched the ground. Buildings vanished into its dark murkiness. It enclosed the major part of the town's principal hospital.

The *Weddington* flew clumsily, like a wingless beetle, making a monstrous throbbing in the air. It wobbled in its flight. It fishtailed and seemed sometimes to progress crabwise. It was not designed for flight in atmosphere and the new excrescence on its bow ruined what streamlining it may have had. It was hopelessly unhandy in the air. But it flew toward Pasadena and wallowed to a lower level and went droning heavily toward the fifteen-hundred-foot pile of smoky spheres.

It blundered into the first of them. All four were growing momentarily thicker and less transparent but still the *Weddington*—by the precedent of planes which had flown through other spheres—should have penetrated it without difficulty.

It did penetrate. But there was a mark where it struck. An instant later it bounced out crazily at an angle to its original course, spinning like a top and making lunatic darts in every direction successively. It had encountered resistance.

It was two thousand feet up and still gyrating unpredictably when Tom crawled back to the control seat. He had been thrown

furiously to one side when the ship hit a spongy obstacle. There was a cut on his temple which bled messily down his cheek. McGuire held fast to stanchions beside a vision port and stared out.

"Lucky!" panted Tom. "I just put a trace of power in the trigger-field. If I'd given it full power we'd have been wrecked. Why can't I have sense? We were trying to make it solid ahead of us! *Ahead!*"

He straightened out the *Weddington* with the gyros. He swung in midair and dived again.

"This time," he panted, "we'll hurt them! I don't know how badly, but we'll hurt! The thing's working! We charge up air with trigger-energy. When it hits ghost matter, it substitutes—air for metal, most likely.

"Since it's a matter of mass, that makes a vacuum which draws more trigger-charged air to substitute for more ghost metal. Hitting it head on was like trying to push a boat through water its bow turns to ice. This time, though—"

He leveled the *Weddington* out. He shot at the chosen globe. The clumsy space-craft throbbed and roared. A hundred yards from it, Tom's fingers moved like lightning. The throbbing ceased instantly. The *Weddington* began to arch downward. And then it spun upon its own axis in midair, turned end for end and vanished into the murky globe backward.

"We'll leave solid stuff behind us now!" gasped Tom. "Hold fast!"

For seconds the little craft plunged through darkness. The globes were dark as black smoke. There was nothing at all to be seen. Then there was light, and Tom's fingers flashed again, and the *Weddington* climbed frantically for the sky, precariously close to the tops of buildings rearing up beyond the hospital.

McGuire said in deep satisfaction, "Nicked him! Not bad at all!"

The spots where the *Weddington* had dived into and left the globe were plainly visible. The trigger-energy field had trailed behind the ship, this time, as it shot through the ghost-globe. And this time Tom had put full power into the field. Borderline matter materialized as matter of this cosmos and air—only air—replaced it in the universe of the ghost-ships.

IRREGULARLY shaped slabs of solid stuff, -exchanged for thin air, became

quite real in this universe and fell crashing through the unsubstantiality of which it had been a part. A complete tunnel of clear air led through the globe where the *Weddington* had pierced it. Because what had been ghost stuff had become real, and no ghost metal but only ghost air had replaced it.

"That'll be a wallop!" said Tom as the little ship climbed. "A few more punctures and they'll know they're hurt!"

He reached the top of the necessary climb and dived again. But as the *Weddington* went roaring downward for further battle, the sphere at which he aimed shot skyward. It was very dense now. Certainly human beings, and possibly other matter of this earth had gone nearer to the borderline of ghostliness.

Patients had become partly unreal. As a necessary consequence the four globes had become very slightly real. And they were vulnerable to the *Weddington*. The clumsy little ship was a deadly weapon to them—though only where there was atmosphere or other substance to trade for the matter of the ghost ships' hulls.

One fled. A second detached itself from the others and shot up for the heavens. Tom swerved the *Weddington*—dived more steeply—and the third of the upper globes fled before it.

Then, from openings in the hull of the remaining murky mass, small murky objects shot out. They soared away, and were suddenly snatched by invisible forces and drawn with enormous acceleration after the three fleeing ships.

LATER Tom and McGuire agreed that these smaller objects were crew members of the crippled ghost vessel. It was still a ghost. It was still not more dense than dense black smoke and it still enclosed a major part of the hospital.

Possibly, in their dive through it, the two men had damaged some essential control or drive mechanism. And Tom guessed that the crew which dived out of the crippled vessel had been snatched by tractor beams in the escaping ships.

But at the moment that did not matter. One ghost ship, dark and well on the way to reality yet still penetrable by normal matter, remained huddled over the hospital building. The raid—if it was a raid—had been at least partly frustrated. But the *Weddington* had been wrongly equipped

when the trigger-energy generator was mounted on its bow.

There were other things to be done. Tom headed it back toward its starting place while he and McGuire canvassed the situation as of the moment. McGuire was very hopeful. It was Tom who was the gloomy one.

"I don't think much can be learned from the ship that was left behind," he said cynically. "If I know the sort of people who'll be in charge in Pasadena you'd have to spend hours getting permission to try to examine it.

"And if I were abandoning a ship in the middle of an alien civilization I think I'd see to it that nothing very informative was left behind. Besides, we'd crippled it anyhow. And"—he paused—"The politicians won't like your being a hero. Not after you lost the last election."

McGuire swore a little. "That's right. I mustn't be allowed to do anything creditable," he said wrathfully. "But what we know has to be passed on and fast!"

Tom said nothing. He aimed for the rambling, gracious house in its roomy grounds, a mile below and five miles away.

"Shells charged with trigger-energy and fired at the spheres," he observed, "will damage the globes. The shells will change to ghost-matter as they hit and make ghostly explosions, which are the only kind that will do any good. There's a defense of sorts against the globes.

"But it's not likely it would bring down a globe in any sort of shape that we could examine. We can't copy machinery made of smoke—and very thin smoke at that! And of course, if they want to, the Ghost-Planet people can turn the same trick against us. It's bad."

The throbbing, moaning noise the *Weddington's* space drive made in atmosphere changed a little. The ship went wallowing down for a landing.

"We've got to turn over the fact that shells can be made effective," said Tom, frowning, "and there's the fact that the patients in that hospital will be in a queer state. They're partly real and partly not.

"We can make them wholly real with trigger-energy charges, but they've got to be careful not to get that energy released until the charged molecules are gotten rid of by natural metabolism."

McGuire had lost his elation. He said gloomily, "I know what will happen. The

Government will start building spaceships. They'll drag them out of museums, and start equipping them with guns. They'll think only in terms of war."

"Naturally," agreed Tom. "And those people have a space drive we need. That we've got to have!"

"Anything we can do to them they can do back to us, with probably thousands of ships to start with! They didn't expect trouble back yonder. They could wreck Earth in a week!"

Tom grunted. He was landing the *Weddington*. It was a ticklish job. The space-boat had just about the maneuverability of a washtub in atmosphere. There was a heavy thud and he cut off the drive. When they climbed down, dispiritedly, they did not look like two men who had struck the first blow to prove that Earth was not helpless against immaterial invaders.

Kit searched her father's face. She seemed to grow paler at his expression of discouragement.

"Father! What happened?"

"We drove them off," said McGuire bitterly, "and we disabled one of their ships and I suspect we started a war. It's a mess! And now I've got to send word to Pasadena how to get those hospital patients back to something like normal. Tom, will that little generator you made first fix up those patients?"

"Yes, sir."

McGuire went into the house. Tom gloomily examined the field generator on the *Weddington's* bow. It had to be shifted to the stern. It could be cut loose and rewelded but he was filled with forebodings—particularly because he already foresaw the only possible thing to do.

"I wish," he said, "one could be as smart as the heroes of the history books! They always know just how everything has to be done from the beginning and never have to do anything over."

Kit repeated, "But what did you do?"

Tom told her. Lan Hardy listened unhappily.

"And your father," said Tom, "is going to pass on what he knows. The Administration will waste time trying to figure out how to keep him from getting any credit for it but at least there's a defense now that they've started kidnaping citizens."

Lan said suddenly, "You mean, charging ghost matter with trigger-energy makes it

real? Just use a generator on the patients and they'll get back to normal? And just do the same to the ship and it can be examined?"

"Kit's father is getting out the small generator now," said Tom. "We'll have to send it over to town, with instructions. But I've got to get this big generator shifted."

Lan went briskly into the house. Kit said, with shining eyes, "Then we don't have to worry about the spheres any more and my father'll be credited with being right."

"We *do* have to worry," growled Tom, "and he'll be given credit only over a pack of dead politicians. We have to worry about the spheres because it's pretty clear that they know that what they want is here. It could be simply—well—human beings."

"I can't guess why they'd want them but that's all they've taken that we know of. And now they know they'll have to fight to get them and they should have all the edge in a war. If we hadn't seemed so helpless they should have been able to smash the *Weddington* like a fly. They just didn't expect an attack."

Lan came out of the house again. He looked at once enormously elated and oddly furtive. He carried the small trigger-energy generator and smiled significantly at Kit.

"Come along, Kit. We're going back to Pasadena. I'm taking this to fix up the hospital patients and start examining the ship. We'll have to hurry."

Kit hesitated, looking at Lan with a peculiar intentness.

"Come along," repeated Lan. "We—" he spoke with the tone of one speaking of a matter understood only by a special person, in this case Kit—"we didn't attend to what we went for anyhow. We'll fix that up and start up the business of defending Earth against whatever the globes are."

Tom said abstractedly, "Get the patients out of the globe. It'll be rather odd if our friends don't come back and retrieve the ship they left behind. They'll come loaded for bear too."

"I thought of that," said Lan rather jerkily. "I'll attend to it. Come on, Kit!"

Kit hesitated. Lan put his hand on her shoulder, urgently. Tom looked at him. Kit flushed a little.

"I'll stay here," she said, inexplicably seeming to be ashamed. "There's more than just—"

"Look!" said Lan persuasively. "The

globes eat people. They're animals! We want to get a defense started against them, besides—that other matter. You're holding things up."

"They're not animals," said Tom curtly. "Why the devil do you insist on believing what the most respectable authorities say, without trying to help us prove the facts?"

Lan ignored him. He caught Kit's arm and sought to lead her to the groundcar. He bent to whisper in her ear. She broke free.

"I'm staying!" she said unsteadily. "This is important, Lan. This is more important than anything else!"

"How can you say that?" he demanded dramatically. "Kit—"

McGuire came out of the house. "Not gone yet?" he asked. "I called the Mayor's office. He's not as big a fool as most. He's waiting for you, Lan. I'll tell him you're on the way and to have a police escort to get you to him in a hurry."

He frowned. Lan dropped Kit's arm and moved hastily to the groundcar. But he paused once more.

"Aren't you coming, Kit?"

She shook her head, surprisingly pale. He started the car and turned it around. He hesitated, as if for her to change her mind, and she did not. He went away toward the highway.

"I cleared that first," rumbled McGuire, "and told Lan a few facts. I wish he had more brains! Right now I'm getting a linkage to a few competent physicists. I'm going to pass on just what we did and why, Tom, and what results we got. Get the facts spread as widely as possible as soon as possible. You know what we've got to do if there isn't to be a war?"

"I suspect I do," said Tom, wily. "Nothing else can possibly turn the trick. Maybe we'll need more fuel though."

McGuire nodded approvingly. "That, and maybe a few other tricks. You're going to cut that gadget free and mount it on the tail?"

CHAPTER VII

The Double Cross

HE DID not wait for an answer. He disappeared. Tom began painstakingly

to reassemble the scaffolding he and McGuire had made to set the field generator on the bow of the *Weddington*. Kit watched him.

Presently she said in a subdued voice, "Tom—"

He bolted a plank in place. "Yeah?"

"Lan and I—we—we went to Pasadena to get married," said Kit. "We almost did."

Tom did not indicate any surprise whatever. He continued to assemble planks for the scaffolding which would hold the generator while he cut it free and again while he rewelded it on the other end of the *Weddington*.

"Why don't you say something?" asked Kit nervously.

"It's none of my business," said Tom briefly.

"Do you—think we should?" she asked uncertainly.

"Why?" he asked reasonably. "You're engaged. Your father is resigned if not enthusiastic. Why sneak off?"

"Lan said my father doesn't like him."

"Lan's been a good friend to me," said Tom shortly. "He has his good points and his faults. If your father doesn't like him he certainly won't like him better for ducking out on an important job."

Kit was silent for a long time. Then she said hesitantly, "Do you think he's clever, Tom?"

"If you're expecting me to play John Alden on his behalf," said Tom shortly, "I won't! If you expect me to malign him so you can get up nerve by growing indignant with me I won't do that either. It's your business, not mine!"

There was a long silence, while the scaffold grew. Then Kit said unhappily, "I thought he was wonderful until I, until I saw him turn pale when he realized we were close to those globes at the hospital. We started to drive right past them on the way to the marriage license bureau. But he was scared. He trembled! And you and Father went to fight them!"

Tom said curtly, "I'm going to cut this loose, now. Will you hand me up that torch?"

She obeyed meekly. He began to cut away the so-recently-welded struts which had held the generator to the nose of the lumpy little space-ship. Kit watched, fidgeting.

"What are you and Dad going to do now?"

"Open negotiations with the spooks, I

suspect," said Tom, drily. "They didn't bother asking us questions. They just looked us over. Maybe the people they snatched away were taken away somewhere for a bit of questioning."

"But we didn't ask questions when we smashed one of their ships. It looks like time for a little conversation before we start trying to kill them or they—more likely—wipe us all out."

"But do you think—"

"If I were boss on the Ghost Planet," said Tom, "I'd have every spare ship over Pasadena as fast as I could get it there and I'd retrieve that wreck before it was examined too closely. And if I'd tracked the *Wedington* home by telescopes from beyond the atmosphere I'd have a flock of fighting ships over this particular spot as soon as I could manage it."

"That's why your father's passing on what he knows as fast as he can. And that's why I neither approve or disapprove of your going to Pasadena with Lan. One place is just as safe or just as dangerous as the other."

The last strut came free. Tom climbed down, climbed in the ship, backed away from the scaffold, swung the ship about on the ground by means of its gyros and delicately backed it into place again.

He got out.

"Not bad," he observed. "I can patch it fast enough."

He climbed up again on the scaffold. Kit saw his eyes measuring and looked among the scraps left over from the original job. She passed one up to him.

"Thanks," he said. "Just about right."

"Tom!" she said after a long silence. "Will you advise me about Lan? Please do it!"

He shook his head to clear sweat from his forehead. The welding torch gave off a lot of heat.

"As long as you're engaged to Lan," he told her, "I tell you nothing. It's your funeral or your wedding."

He worked. From time to time she handed up a bit of metal which was either a near fit or could be cut down. He finished the job and began to resplice the cables while she watched.

He was just about finished when McGuire appeared at the side of the house and called grimly:

"Kit! Tom! Come in here, please! I want

you to hear a broadcast. Lan's made his report and he's a hero."

TOM brushed off his hands and went inside.

McGuire said sourly, "I heard the bells of an extra-emergency 'cast. Lan made his report and evidently demonstrated on the disabled sphere. He's coming on the screen in a minute."

Kit went a trifle pale. Somehow, she did not look like a girl about to hear the man she was to marry in a public and heroic part. An unctious voice said blandly, "... with the unprecedented speed with which the present administration knows how to act in emergencies, Lan Hardy's report and demonstration was transmitted to the highest levels on the heels of the report of the events at Pasadena."

"Acting under emergency powers the World President has ordered every available factory to produce trigger-energy generators at the highest possible speed. Meteorological service guided rockets are being prepared to become bombs against the mist-spheres as soon as the necessary generators can charge them for conversion as they will act against these extraordinary animals."

"Animals!" said Tom blankly. "But if he worked the thing on that ship he *saw* it turn into metal! They're ships!"

"Within hours," the announcer's voice assured them, blandly, "all Earth will be equipped with defenses against these strange forms of life from outer space. Moreover, every space-ship able to take to space will be crammed with atomic explosives."

"Within days guided missiles will be detonated within the misty comet—evidently the parent organism—creating such a terrific explosion within its heart that it will be blown to atoms. Atomic explosives in thousands of tons will shatter the comet in a blast so intense that the human mind cannot conceive of it."

Tom and McGuire stared at each other.

"I," said McGuire, "told the government that it was a planet and the spheres were ships. But if I am right somebody may not get reelected. So it has to be an animal and it has to be destroyed—and the chance of our getting a space drive is gone forever!"

His voice held the quintessence of bitterness.

"Here is Lan Hardy," said the announcer proudly. "He will tell you of his discovery and its fruits."

Lan's face appeared on the vision screen. He was brightly, happily at ease.

"I was very fortunate," he said modestly. "The strange type of matter the invading life forms comprise seemed to be unaffected by any force or matter at our disposal. But it occurred to me that trigger-energy might have an effect and I tried it in a hastily improvised form.

"I am very happy that I have been able to offer to my fellow citizens a defense against creatures beyond our experience and plainly dangerous to Earth. I am more relieved than anybody else and more grateful for the idea, because I saw the Earth as a hunting ground for unspeakable intangible monsters, who could devour human beings while we were helpless to take any action against them."

HE SMILED, very appealingly. He made a graceful wave of his hand. He faded from the screen.

"Lan Hardy," boomed the announcer, "by special Presidential order, is in full charge of the defense against the creatures which have begun to attack the people of Earth."

Kit struck off the switch which kept the vision plate alight.

She faced the others, stammering and dazed.

"But he—he didn't!" she stammered. "You two—you and Father did it!"

Her father said drily, ignoring her, "An emergency exists, Tom. You didn't hear that part at the beginning. The World President proclaims an emergency, takes over emergency powers—and he can do anything necessary to control all action against anybody and anything."

"The first thing he'll do is put us in protective custody to keep us from denying that the ships are animals. I can't be allowed to do anything! I'm a political has-been. I can't be allowed to come back. Now tell me—how much more has to be done to the *Weddington*?"

"All finished, sir," said Tom. "I'd like more fuel but we can take off."

"Then we take off," said McGuire. He turned to Kit. "We'll be hunted, I suspect. No danger, of course. This is merely criminal stupidity, not political murder they'll have in mind. But do you want to stay here?"

"N-no!" said Kit. "I—I—" Then she sobbed. "Tom! What should I do?"

Tom said, "I told you I'd give you no advice as long as you're engaged to Lan. It's your business."

"But—but—" Then she stamped her foot. "I wouldn't marry him! I'm not engaged to him! I'll never speak to him again!"

"Then," said Tom, "what are you waiting for?"

There was a thin buzzing noise overhead. It seemed to grow louder. McGuire, swearing, raced for the door with the others after him. Tom caught Kit's hand to help her run faster. McGuire was climbing into the *Weddington* as the others emerged into the open air. There were specks in the sky—solid specks with helicopter screws above them—and they were coming swiftly nearer.

Tom heaved Kit to the doorway and inside. He climbed after her. The entrance port slammed. Instantly McGuire threw on the drive and, with a monstrous roaring and moaning sound, the *Weddington* shot upward.

Surprisingly McGuire seemed to be amused. "Lan made a very quick deal!" he observed. "He gets a fancy administration post, stupidity has the upper hand and all space-ships of all classes are commandeered by the government. They won't dare shoot us down, though. After all I've had no formal order to turn over this ship. But they certainly came for it in a hurry!"

The *Weddington* shot skyward. A helicopter, with whirring screws, dropped past the control room windows. Another went careening crazily past.

"Almost rammed him," said McGuire. "Damn politics! Let 'em keep clear of us!"

The *Weddington* penetrated a thick white cloud. It sped on and on and on, upward. Presently the sky turned purplish and stars appeared faintly. Then the sky was black, with a myriad unwinking specks of light everywhere and a glaring yellow ball of a sun.

The earth was a vast, indistinct space below them.

"And now," said McGuire comfortably, "what are we going to do? If I'd had time to get some supplies I'd head for the Ghost Planet direct. I want the space-drive they've got. They want something we've got. How are we going to see if we can't swap what we want instead of fighting for it?"

Kit said suddenly, very confidently, "Tom will think of something!"

CHAPTER VIII

Contact!

TOM did. Not by any sudden inspiration, but forced to it by a dodged hanging-on and the sheer necessity put upon him by the ships of the ghost-planet. The *Weddington* continued to climb, no longer rapidly but as the alternative to descent. There was no such storage of fuel in her tanks as would make a journey to the Ghost Planet feasible unless she spent long weeks coasting with no expenditure of power.

And that was not practical. Long before an economy-voyage could be achieved guided missiles from Earth would have made any possible negotiations impossible. The guided missiles would be converted survey-ships and reserve supply craft used to keep the observations on Luna and Mars and Mercury provisioned.

They would be such monstrous bombs as might, indeed, shatter any civilization—any ghostly civilization—the Ghost Planet could support. But surely, before then, hostilities against the misty fleet would have begun with such vigor that warfare would be openly admitted, and the space-drive that had brought it across uncounted trillions of miles of emptiness would be ready to carry the Ghost Planet beyond the reach of Earth's relatively short-range weapons.

The sunlit Earth was a hazy solidity filling half the void outside the *Weddington*. The curve of its edge was plain against the glimmer of the Milky Way. But against that glimmer, too, there appeared those seeming bits of thistledown which were actually the space vessels of the mysterious Ghost Planet.

From the west a squadron of no less than forty drove above atmosphere toward the very spot where the *Weddington* climbed slowly toward an as yet unannounced destination. Kit saw them and pointed them out uneasily.

"Hm," said Tom coldly. "Their normal traveling acceleration is four point two gravities. We can't beat that. What do we do? Dive down into atmosphere where we're able to fight?"

But he was already changing the controls. The *Weddington* ceased to climb. It began

to sweep in a great circle some five miles across.

Tom said explanatorily, "They can see us. If we run away or dive for Earth, we'll look scared. Just pretending to patrol above Pasadena, we can bluff for time—I think."

He searched with his eyes around the edge of the great sweep the *Weddington*, now made over Pasadena. He nodded.

"They're coming all right! There's another fleet. And there's still another. We've hit back. As a military operation it's necessary to find out immediately what we've got—if they mean war. And apparently they do."

McGuire said shrewdly, "We have only to dodge down into atmosphere and we can fight them. Actually, with the trigger-energy field turned on, we'd energize air so it would be ruinous to them. Chasing us, our wake could cut them in two, just as we punched holes in the ship down yonder."

"Sure," said Tom grimly. "But we're in a bad spot. Not for ourselves, of course. I think we can make a break. But if we've been sighted and then run away—" He spoke wrathfully. "I'm thinking of leaving the Government in a good position. We can't reveal its weakness though it wants to put us in jail!"

There was silence. That was true. If the *Weddington* had been sighted, to the mist-ships it would represent the people on Earth. If it fled, it would convict them of cowardice and lead to immediate attack. But if it did not flee and was defeated, it would even more definitely prove the present defenselessness of Earth.

As loyal human beings, it was up to Tom and McGuire to prove the courage and deadliness of Earth people with very inadequate means. Against mist globes not expecting attack the *Weddington* had been effective. Against a fleet gathering for action against her the little Earth ship was rather pathetic.

The V-shaped formation of mist-globes swept nearer and nearer and nearer. When within a very few miles its rate of nearing lessened. The whole formation came to a stop, perhaps a hundred and fifty to two hundred miles above Earth's surface. It hung in mid-space.

The *Weddington* continued its grim circling. Other mist globe formations appeared.

"They see our ionization-trail," said Tom sourly. "They're debating what to do. They can't be bluffed off permanently."

ROUND and round and round the circle the *Weddington* went. A second formation arrived. It checked and stopped like the first. A third and fourth and fifth formation—they seemed to drift into a ringlike arrangement, lining the course of the circuit the *Weddington* repeated over and over and over, looking like fat round spooks regarding a curious phenomenon.

"They know we can hurt them," said McGuire suddenly. "At least, they know we did. And it's crazy for us to defy them with no weapon better than we've got. Maybe they think we've got something we're quite sure will handle them and are waiting for them to start something!"

The spectacle was peculiar in the extreme. The *Weddington* was squat and clumsy and unhandy. Here, where any trace of air remaining was as thin as the substance of the ghost-ships themselves, the little ship went in what seemed an abstracted, yet somehow defiant circling within the ring of gossamer-thin unsubstantial spheres which watched it.

"If they think we're daring them—" said Tom suddenly, "they think we could attack them but are holding back. For the love of St. Peter! Don't you see what we're doing? We're assuming they're like men! That they'll get into wars they don't want because they're led by fools!"

He suddenly pounded on the control-board. The circular course of the *Weddington* continued unchanged but her progress was in jerks.

"What—what're you doing?" demanded Kit, grabbing hold of a stanchion.

"Taking a chance," growled Tom. "They can see our ionization-trail. I'm guessing that they think we've been daring them to attack us and yet not attacking ourselves. So, now that we've defied them long enough, I'm signaling with our wake.

"I'm turning the drive off and on. I'm making puffs of stuff from our exhaust, running through numerals first. I've gotten up to six. Now I'll start doing squares, and then I'll do cubes in series. The information won't be new but it will show that we are assuming they're rational creatures and that we are prepared to communicate with them."

The *Weddington* continued to circle tediously. Suddenly one of the globes flared. A spot of distinct luminosity appeared below it. And the luminosity flared and dimmed, first in a series of flashes which meant num-

erals, then two twos and then four flashes, then four flashes and four and sixteen after it.

"They want to talk," said Tom with a sigh of deepest relief. "It's queer we know that a war means both sides lose and neither wins but we never act on that assumption. We didn't even begin to suspect that another civilized race might have found out the same thing and that they might act on it!"

He checked the speed of the little Earth-ship and came to a stop in mid-space opposite the ghost-globe that had flashed the light. He plainly, specifically, singled it out. Then he began to descend toward Earth. After a bare second the ghost-globe followed it.

McGuire grinned. "For another twelve hours," he told Tom, "we're a monopoly on weapons against the ghosts. It'll take that long to turn out more trigger field generators. So for that long we can act as ambassadors and the Administration will have to backwater.

"It can put pressure on the news services, but it can't suppress this! I'm going to put out a G. C. emergency aircraft call the instant we're under the Heaviside layer. By law all other radio traffic has to stop.

"And when I announce that I'm bringing a ghost globe to Earth under a flag of truce to open negotiations with the Government—let them try to suppress the news! A democracy can make some horrible blunders but praise Allah there are limits!"

And the ghost globe and the *Weddington* settled down out of emptiness where the sky was dark and many stars burned, to a place where the sky was merely deep purple, and then to a level where there was blue overhead and clouds not too far below and then down below those clouds.

The *Weddington*, in fact, settled with a bump beside McGuire's own house and the police who had raided it less than two hours since were very respectful. McGuire had made his G. C. call while the two ships were still ten miles up and the people of Earth were definitely alarmed enough to demand accommodation instead of war. The air-police had received instant sweeping orders. McGuire was grimly triumphant.

The ghost sphere settled close by and it was quaint to see how cagily the air-police stayed away from it. But Tom and McGuire climbed down from the *Weddington* and walked toward it.

"This is unprecedented," McGuire told

Lan sardonically. "That a private citizen should be able to overrule the stupidity of his elected rulers and force the practise of common sense. Now, if our friends the spooks are just as sensible—"

For an instant, under the thin and tenuous unsubstantiality of the ghost globe, it all seemed very improbable. But the globe abruptly began to thicken. Instinctively Tom's pulse raced.

McGuire said calmly, "They're taking some dirt from the lawn into the other cosmos to make themselves more visible to us. It's a good sign."

The globe reached the density of black smoke. A darker space appeared in its underside. Something square and misty came out and floated to the earth. It checked there and solidified.

"Trigger-energy," said McGuire, in satisfaction. "We thought of charging shells with trigger-energy to make them real to the ghosts. They've charged a gadget of some sort with the same energy to make it real to us."

HE PICKED up the gadget—which still, however, was curiously light in weight.

"Vision screen," he observed. "Evidently, they figure they can communicate between the two universes. Hm—they wouldn't have to transmit energy between. If they could control energy in this cosmos from that—to be sure! No energy transmission. Just control. Let's look."

Then he uttered an exclamation. A face looked out at him from a disk on the face of the square object. It was not a human face at all but it had eyes which were obviously intelligent. The cube from the mist sphere made humming sounds.

"My word!" said McGuire. "It's not language but I understand it!"

So did Tom.

* * * * *

There was a flare of trumpets from the vision set, and the non-human but non-repulsive countenance of the creatures from the Ghost Planet faded out. The screen lighted again, and the dogged, heavy-lidded features of McGuire looked out.

"That," he said practically, "was the face of the official commanding the exploration fleet of the Ghost Planet. Let me make it clear! There are two universes at least—no-

body knows how many more there may be—which touch each other along some one or two of the dimensions by which each is measured.

"We have known of the existence of ghost suns for centuries—suns so thin that they are practically vacua, yet which glow. We know now that such suns are actually normal suns in another universe, with planets and gravitations of their own.

"The Ghost Planet revolved about such a sun. Its people—one of whom you have just seen—developed a civilization in some ways greater than that of Earth. But just as some of our arts lag behind others, some arts lagged behind there. Some mentalities are not suited for some types of investigation.

"The people of the Ghost Planet did not progress in biology as we have done. Their civilization reached a limiting point, beyond which it could not go without further progress in a science which was stalled."

McGuire blinked from the screen.

"They sent out exploring ships in quest of the knowledge they had failed to acquire. They found other civilizations in their own universe, none equal to theirs. Yet they could not hope to go on without knowledge their own science had not discovered.

"They were in the position of humanity. We have needed an interstellar drive for a very long time. We must emigrate or suffocate. But emigration has been impossible. The people of the Ghost Planet were limited by a spontaneous mutation of their body cells which once existed on Earth but was conquered seventy years ago.

"They came to Earth. To them our sun is a ghost sun and our planet a spectre. But their exploring ships found a civilization here—and no sign of the disease which had balked all their science. So one of the planets they had colonized came across the void, to serve as a base for their examination of our science, to learn how we had escaped their own disaster."

Then McGuire said, without melodrama, "We have exchanged information with them. They have given us the secret of an interstellar drive, by which all the planets of our universe are made available to us for colonization. The farthest rim of our Galaxy will be no more than four weeks' journey when we have built ships with the new drive.

"In return we gave them information which is now included in the schooling of human children at the age of ten. We gave

them the history of the human conquest of cancer. The Ghost Planet returns to its own place. The two races will never again encounter each other unless they so wish it.

"We have galaxies to occupy and to develop. They—are our friends. Already they have returned the humans they drew in—to their own cosmos in the hope of getting the information they sought.

"The individuals they chose were, unfortunately, so frightened or so limited in education that they had forgotten the facts they learned in grammar school. It was necessary for a great deal of confusion to occur, and a great many misunderstandings to happen, before actual two-way communication was opened and the bargain for the exchange of information struck. It is struck. Both races are immeasurably enriched."

Then McGuire said prosaically, "I think that is all."

His face faded from the screen. An announcer's unctuous voice began, "You have heard the broadcast of the bargain made—"

Kit threw off the switch. Her father came in the door from the next room.

"How did I do?"

"Wonderful!" said Kit. "But you didn't say a word about Tom!"

Tom grinned. Kit's father chuckled.

"Tom wanted it that way. We're forming a space-ship company to use the new drive. He doesn't want to be commandeered for lectures on borderline matter and the biology of ghosts. He could be under the controlled research laws."

"I'd like," said Tom meditatively, "to find a planet not too much unlike Earth but not so crowded and start a little colony there and do research without worrying about anything in particular."

"Wonderful!" said Kit, her eyes shining.

Her father said abruptly, "Lan called up. He explained that he said what he did to get a defense program started. He claimed all credit to bypass the Administration anxiety not to give me any. Now he's in an awful mess. But I straightened the young man out."

Tom said, "How?"

McGuire chuckled again. "I said at the time he'd made a quick deal with some politicians I know. It backfired and he made a fool of himself. So I suggested that since I've become a hero in spite of myself and all my enemies, the gentlemen he made the deal with won't want that deal made public. And I suggested that he could blackmail them out of a comfortable government position. I think he was quite grateful for the suggestion."

Kit said, "Father—"

"What?"

"I'm engaged to Tom."

Her father displayed no surprise at the announcement.

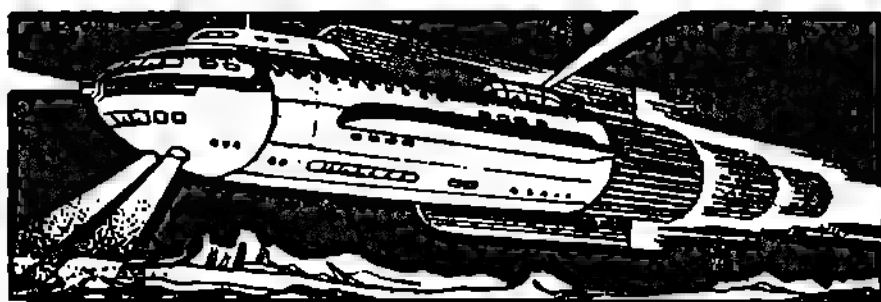
"And," said Kit, "we're talking about when to get married."

Her father said judicially, "Talk it over with him. His ideas, so far, have been pretty good. But—hm—I'm going to push this interstellar drive business fast! I'll have a ship ready to take off in three months or less, I suspect."

"Well?"

"Either it should be a honeymoon trip," her father observed, "or the honeymoon should be over before you start. Preferably the latter, I'd say. I'll want Tom available for consultation as the trip progresses. Use your own judgment."

Tom did.

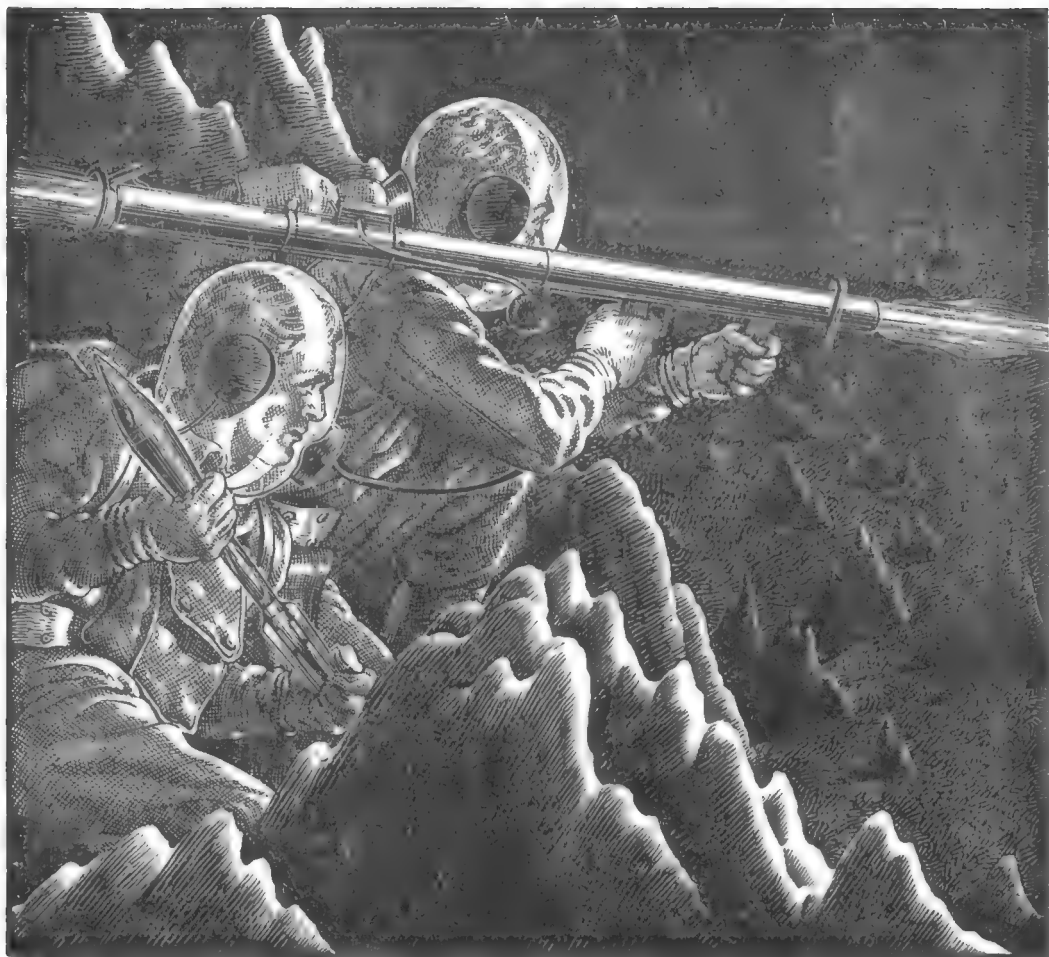


FEATURED IN THE NEXT ISSUE

THE WEAPON SHOPS OF ISHER

A New Novel by

A. E. VAN VOGT



240,000 MILES

The "Angel" was named in sarcasm—a fact which officials failed to take into account when they sent him to the Moon on a mission of surrender!

CHAPTER I

Left at the Post

THE PARTY was wild. The night was gay. And the "Angel" was very, very drunk.

But who wouldn't have got drunk on such an occasion? The Angel was about to head man's first attempt to conquer space and within a few short hours he would be

boring space to the Moon, 240,000 miles straight up.

He had tried to stay sober but this, being without precedent in the Angel's career, was entirely too great a strain. "Don't dare take another grink—well—jush one more—hic!"



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STRAIGHT UP

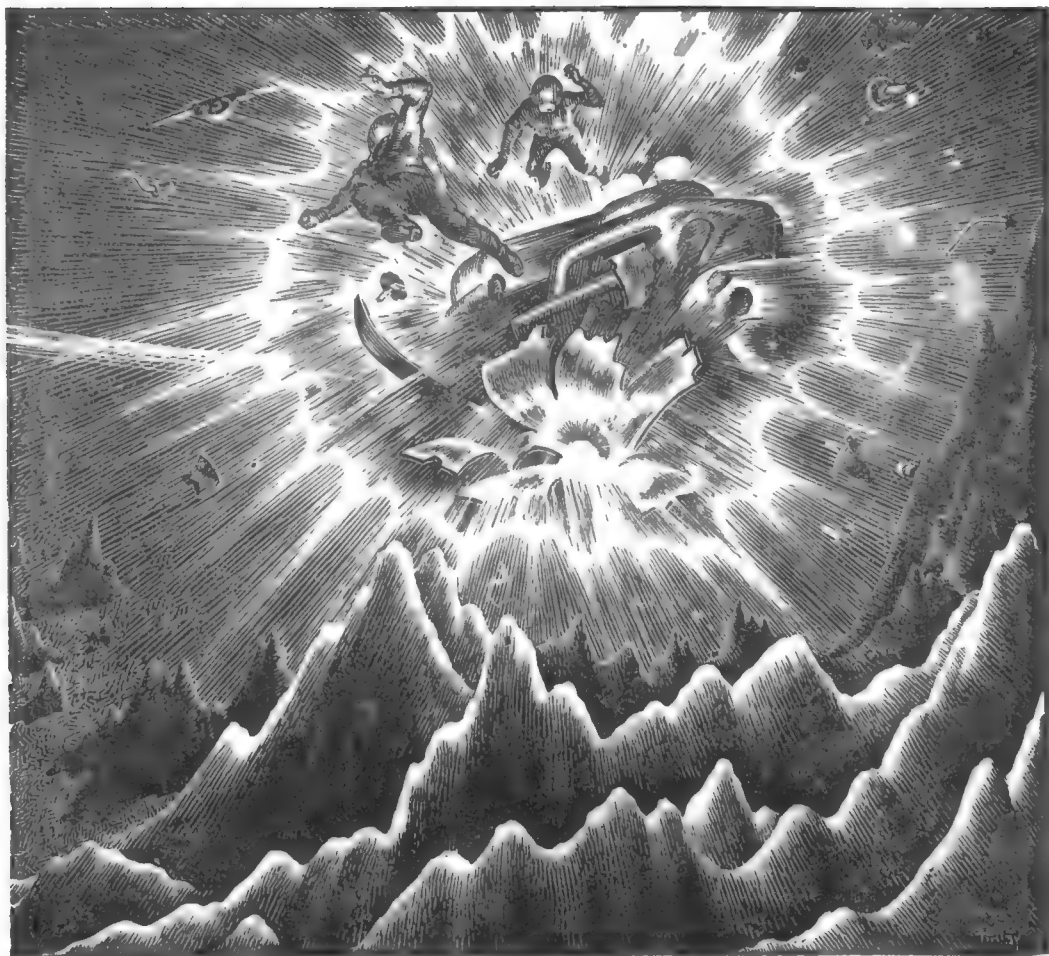
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The army, with a taste of opposites, called

him Angel from the first, called it to his face, loved him and was hilarious over his escapades.

This was probably the first time in history that Angel had attempted to stay sober. But it was a wonderful party they were giving in his honor (two floors of the Waldorf *plus* the ballroom) and people kept insisting that he wouldn't get another chance at a drink for months and maybe never and everyone was so pleasant that good resolu-

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tions were very hard to hold—especially for a dashing young officer who had never tried to make any before.

The occasion was gala and his hand was sore from being pumped by brasshats and newsmen and senators. For at zero four zero eight of the dawning, First Lieutenant Cannon Gray, U.S.A., was taking off for the Moon.

It was in all the papers.

Several times Colonel Anthony, a veritable old maid of a flight surgeon, had tried to pry his charge loose and steer him to bed and, while Angel seemed willing and looked blue eyed and agreeable, he always vanished before the hall was reached. Really, it was not Angel's fault.

No less than nineteen frail, charming and truly startling young ladies, all professing undying passion and future faithfulness, had turned up one after the other and it was something of a task making each one unaware of the other eighteen and confirmed in her belief in his lasting fidelity.

Such strains should not be placed upon young men about to fly two hundred and forty thousand miles straight up. And it takes hours to say a proper good-by. And it takes more hours to be respectful to brass. And it takes time, time, time to drink up all the toasts shoved at one. All in all it was a very exhausting evening.

Not until zero one zero six did Colonel Anthony manage to catch the collapsing Angel in such a way as to keep him. Wrapped in the massive grip of Colonel Anthony, Angel said, "Candrin four oh eigh—*snore!*"

The golden head dropped on the Colonel's eagle and Angel slept.

Cruelly, it was no time at all before somebody was slapping Angel awake again, standing him on his feet, getting him into a uniform, wrapping him up in furs, weighing him down with equipment and generally tangling up a dark, dismal and thoroughly confused morning.

Angel was aware of a howling headache. Small scarlet fiends, especially commissioned by the Prince of Darkness for the purpose, played a gay chorus with red hot hammers just behind Angel's eyes. He was missing between his chin and his knees and his feet wandered off on various courses.

A FLIGHT major and two sergeants undeniably capped with horns, danced in high anxiety around him and managed

to touch him in all the places that hurt.

He was in horrible condition and no mistake.

And the watch on his wrist gleamed as hugely as a steeple clock and said, "Zero three fifty-one," in an unnecessarily loud voice.

The corridor was at least half the distance to Mars and Angel kept hitting the walls. The casual chairs with which he collided all apologized profusely.

A potted palm fell on him and then became a general who, with idiotic pomposity said, "Fine morning, fine morning lieutenant. You look fit. Fit, sir. No clouds and a splendid full moon."

He felt the call, one which generals too old for command can never resist, to give a young officer the benefit of a wealth of experience but, fortunately, his aide swiftly interposed.

The aide was brilliant with the usual aide's enthusiasm for paper glory and distaste for generals. Angel knew him well. The aide, in Angel's day at the Point, had been an Upperclassman, a noted grind, a shuddery bore and the darling of his seniors. He didn't look any better to Angel this morning.

"Beg pardon, sir," said the aide sidewise to the general, "but we've just time to brief him as we ride down. Here, this way lieutenant." And, abetted by the usherlike habit peculiar to the breed of aides, he got Angel into the car.

"Now," said the aide to Angel, who was hard put to stifle his groans and shivers at the unearthly hour, "you have been thoroughly briefed. But there must be a quick resumé unless you think you are thoroughly cognizant of your duties."

Angel would have answered but the sound came out as a groan.

"Very well," said the aide, just as though *his* were the really important job and Angel was just a sort of paperweight, very needful to aides but not at all important. "The staff is terribly interested in your surveys."

"You will confine yourself wholly to this one task. It has been thought wisest to entrust a topographer with this first mission because, after all, that's the way things are done. We've insufficient reconnaissance to send up a main body."

Angel would have added that he was a guinea pig. They didn't even know if he

could really get to the moon. But aides talk like that and lieutenants somehow let them.

"As soon as you have completed a survey of an elementary sort you will televise your maps, then send a complete set in a pilot rocket and return if you are able. But you are not to risk bringing the maps back personally."

They were little enough sure he'd ever get there, much less get back.

"You will phone all data back to us. Our tests show that the wave can travel much further than that. Anything you may think important, beyond maps and perhaps geology, you are permitted to note and report."

"Under no circumstances are you to attempt to change any control settings in your ship. Everything is all pre navigated and proper setting will be phoned to you for your return."

"All instructions are here in this packet."

Angel shoved the brown envelope into his jacket and felt twinges of pain as he did so.

"My boy," said the general, getting a word in there somehow, "this is a glorious occasion. You have been chosen for your courage and loyalty and it is a great honor. A great honor, my boy. You will, I am sure, be a credit to your country."

Angel didn't mean it to be a groan but that is the way it came out. They had chosen him because he was the smallest man ever to enter West Point, his height having been waived because of the lump of tin—the Congressional Medal of Honor, no less—he had won as an enlisted man (under age) in the war.

They had needed a topographer who wouldn't subtract from pay load. Space travel was to begin with seeming to create a demand for a race of small men. But he didn't tell the general this and they came to the end of the ride.

THE aide expertly ushered Angel out into the bleak blackness of the take-off field, where every officer and newspaperman who could wangle it was all buttoned up to the ears and massed about the whitish blob of the ship.

The flight surgeon took over and protected Angel from the back swats and got him through to the ladder. The two smallish master sergeants—Whittaker and Boyd—were waiting at the top in the open door of the ship. Metal glinted beyond them in

the lighted interior.

Whittaker was methodically chewing a huge wad of tobacco and Boyd was humming a bawdy tune as he stared up at the romantically round and glowing moon in the west. They were taking off away from it for reasons best known to the U.S. Navy navigators who had set the course.

A commander was hurrying about, muttering sums, and he paused only long enough to glare at Angel. "Don't touch those sets!" he growled, and rushed off to take station at the pushbutton which, when all was well, would fire the assist rockets under the carriage on the rails. These were keyed in with the ship's rockets. The commander glared at his ticking standard chronometer.

The flight surgeon said, "Well, you've got a week to sober up, boy. You won't like this take-off."

Angel gave him a green smile. It hadn't been the champagne. It was the apricot cordial that Alice had brought him to take along. "I'll be fine," said Angel, managing a ghost of his lovely smile.

"Board!" shouted the commander.

Angel went up the ladder. Whittaker spat out his chew and lent a hand. Boyd was standing by on the stage and, more to avert the necessity of having to see Angel's poor navigation than from interest, turned a powerful navy night glass on the Moon. Boyd was very fond of Angel in a cussing sort of way.

But Angel made it without help and had just turned to give the faces, white blurs there in the floodlights, a parting wave to the click of cameras when Boyd yelled.

"Oh, my aching Aunt!"

There was so much amazed fear in that shout that everyone stared at Boyd and then turned to find what he saw. Angel found Boyd shoving the glasses at him.

"Look, lieutenant!"

Angel hadn't supposed himself able to see a thousand-dollar bill, much less the clear Moon. And then he jumped as if he'd been clipped with a bullet.

The commander was howling at them to batten down but Angel stood and stared, glasses riveted to the lunar glory.

Those with sharper eyes could see it now. And a wail went up interspersed with awful silences. Even the testy commander turned to stare, looked back to the ship and then whipped about to snatch a quartermaster's glass from his gunner. He took one look

and froze in silence.

Every face was uplifted now, the field was stunned. For there on the moon in print which must have been a hundred miles high, done in lampblack, were the letters—

U S S R

CHAPTER II

Take-Off

FOR some days Angel languished in bachelor officers' quarters, all out of gear. He had been nerved up to a job and then it hadn't come off. The frustration resulted in lack of any desire for animation of whatever kind.

It was the sort of feeling one gets when he says good-by, good-by, to all his friends at the curb and then, just as he starts off in the car, runs out of gas and has to call a garage.

His room was littered with newspapers which he had long since perused. The mess-boy brought stacks in every now and then until bed and furniture seemed to be constructed badly of newsprint.

His own personal tragedy was such that he hardly cared for the details. Instead of being the first man to fly to the Moon he was again just a simple lieutenant with nothing more than his deserved reputation for angelic wickedness. It came very hard to him, poor chap.

But it came very hard to the world as well. For events had transpired which made any former event including World War II a petty incident.

The world had been conquered without firing any other shots than those needed to propel Russian forces to the Moon. The head of the Russian state had promptly issued manifestoes in no uncertain terms demanding that all armies and navies be scrapped everywhere and Russian troops admitted as garrisons to every world capital. Russia had plans.

One by one countries had begun to fly the hammer and sickle without ever seeing a single Red army star.

For it was obvious to everyone. Even statesmen. All Russia had to do was launch atom bombs from the Moon at any offender to destroy him wholly.

The mystery of how Russia had solved the atom bomb and had so adroitly manufactured all the plutonium it could ever need was solved when a Russian scientist stated for the press that he had needed but one year and the Smythe report. Everybody began to quiet down, for at first there had been talk of traitors and selling the secret.

But now that it was at last obvious that there never had been any secret and that self-navigating missiles could be very easily launched from the Moon at any Earth target and that, such was the gravity difference, it would be nearly impossible to bomb-saturate the Moon from Earth, even the die-hards could see they were whipped.

A demand on Washington had come from Russia for the entire U. S. atom stockpile and Congress was debating right now, without much enthusiasm, a law to give it up.

It had been very striking the way the morale of the world had collapsed, seeing up there in the sky those giant letters, U.S.S.R. Communists in every land had begun to crawl out from under dubious cover and prepare welcomes for Russian troops (and the Russians had been bidding the foreign communists to crawl right back again).

To understate the matter, there was some little consternation in the nations and peoples of the world. And whatever labor thought about it they at least remembered that of all the civilized nations of Earth, Russia had been the only one after World War II to employ, use, exploit (and let die) slaves.

And then, just as surrender was being accomplished, the U. S. Naval Intelligence, working with the State Department, had done some interception and unscrambling and decoding which again gave everyone pause. By great diligence and watchfulness they had managed to tap in on the Moscow-Moon circuit to discover that all was not well.

Angel had been reading about the Moon commander. The man was General Slavinsky and at first reading Angel had decided, with a bitterness not usually found in celestial sprites, that he hated the trebly-damned intestines of General Slavinsky.

Slavinsky was known as the "Avenger of Stalingrad" and had been a very popular general in his own country. The Germans, however, had not liked him, jealous no doubt of the thorough sadism of the Russian.

When Slavinsky had not been winning bat-

ties he had been butchering prisoners and he had turned his men loose to loot in many a neutral town and conquered province. Slavinsky evidently had himself all mixed up with Genghis Khan, complete with pyramids of skulls.

The pictures in the papers showed Slavinsky to be a big, powerful man, meticulously uniformed, always smoking cigarettes. Typical corporal-made-good, Slavinsky had been Moscow's favorite peasant. About as cultured as a bull, he was quite proud of his refinement. And he had been sent with troops, supplies and bombs to command Russia's most trusted post, the Moonbase.

It was here that dictatorship displayed its weakness. Bred by force out of starvation, the Russian state had very scant background of tradition. And trustworthy military forces are trustworthy only by their tradition. Slavinsky owed no debt to anyone but the Russian dictator. The Russian people would not know one dictator from another.

IT DEVELOPED, when Slavinsky was well dug in, that he had been a Trotskyite since boyhood and the murder of his ideal in Mexico had left him festering very privately. At least that was a fine excuse.

Once there Slavinsky began to make certain demands on Moscow. Moscow was beginning to be acrimonious about it. The dictator had ordered Slavinsky home and Slavinsky had told the dictator where he could stuff Moscow. Moscow was now threatening to withhold needed supplies.

U. S. Naval Intelligence and the State Department were very interested and rumors flew amongst the personnel of the U. S. Moon Expedition that something was about to break.

Angel lay on his back, feet against the wall-paper and gloomed. When a knock came on the door he supposed it was another load of papers and sadly said, "Come in."

But it was a colonel who stood there and Angel very hastily bounced up to sharp attention.

"We're having callers, son," said the Colonel. "Be down in the court in five minutes."

Disinterestedly, Angel got himself into a blouse and wandered out. He wondered if he would ever feel human and normal again. All his life he had been a somewhat notorious but really rather unimportant runt and the

big chance to be otherwise had passed, it seemed, forever.

He hardly noticed his fellow officers as he lined up in the court. Most of them were of the Moon gang, destined to go, once upon a time, in various capacities on the abandoned expedition. None of them looked very cheerful.

There was hardly a ripple or a glance when the big Cadillac drew up at the curb. Their senior barked attention and the officers drew up. Only then, when ordered to see nothing and be robot, did Angel note that the car had the SecNav's flag on it.

Four civilians, namely the secretary of state, the secretaries of defense, war and the navy, alighted, followed by a five star admiral and a five star general. They were a dispirited group and they cast wilted glances over the lines of young officers.

The colonel in command of the detachment fell in with them behind the secretary of state and proceeded with this strange inspection.

Finally the group drew off and stood beside the Cadillac talking in low tones until they nodded agreement and then waited.

The colonel sang out, "Lieutenant Gray!"

Angel started from his trance, came to attention, paced front and center and automatically saluted the group. The colonel looked baffled as he came forward.

In a voice the others could not overhear, the colonel said, "I have no idea why they chose you, Angel. They were looking specifically for the tamest officer here. God knows how or why, but you won. They couldn't have looked at the records!"

"Thank you, sir," said Angel.

The colonel gave him a hard look and led him off to the car.

They didn't say anything to him. Angel got in beside the driver and, when the doors had shut behind the rest, they moved off at a dispirited speed.

Nothing was said until they arrived in the driveway of the White House and then the general told Angel to follow them.

The abashed lieutenant alighted on the gravel, looked up at the big hanging lantern and the door, then quickly went after his superiors. This was all very deflating stuff to him. The closest he had ever come to the President was leaving his card in the box for the purpose in the Pentagon Building—and he doubted that the President ever read the cards dropped by officers newly

come to station or passing through.

He hardly saw the hall and was still dazed when the general again asked his name, sotto voce.

"Mr. President," said the five star, "may I introduce First Lieutenant Cannon Gray."

Angel shook the offered hand and then dizzily found a chair like the rest. All eyes were on him. Nobody was very sure of him, that was a fact. Nobody liked what he was doing.

"Lieutenant Fay—" began the President.

"Gray, sir."

"Oh yes, of course. Lieutenant Gray, we have brought you here to ask you to perform a mission of vital importance to your country. You may withdraw now without stigma to yourself when I tell you that you may not return from this voyage.

"We considered it useless to ask for volunteers since then we would have had to explain a thing which I believe we all agree is the most humiliating thing this country has ever had to do. We are not prepared just now for publicity. You may withdraw."

This, thought Angel, was a hell of a way to force a guy into something. Who could withdraw now? "I am willing," he said.

"Splendid," said the president. "I am happy to see, gentlemen, that you have chosen a brave officer. Here are the despatches."

ANGEL looked through them quickly and then at the first page of the sheaf, which was a brief summary.

He learned that one Slavinsky, late general of Russia, had finally, forever parted company with his dictator and had declared himself master of Russia *and* the world. The United States was now addressed in uncompromising fashion by Slavinsky and ordered to do two things.

One, immediately to prepare a land, sea and air attack on Russia—one city in the United States or one city in Russia to pay for the first use of atom bombs by either—in order to secure the government of that nation to Slavinsky. And two, to send instantly a long list of needed supplies by one of the space-ships known to be ready in the United States. Angel knew that he was to be interested in "two."

"This situation," said the President, "is unparalleled." And with that understatement, continued, "Unless we comply we will lose all our cities and still have to obey. We

are insufficiently decentralized to avoid these orders.

"Humiliated or not, we must proceed to save ourselves. Slavinsky holds the Moon and is armed with plentiful atom rockets. And he who holds the Moon, we learn too late, controls all the earth below.

"We are asking you," he continued, "to take the supplies to the Moon. We have secretly loaded a space-ship with the required items and need only one officer and two men as crew.

"The reason we send you at all is to ensure the arrival of the supplies in case of breakage on the way and, more important, in the hope that Slavinsky will let you go and you can bring back data which, if accurate enough, may possibly aide us to destroy Slavinsky and his men."

"Mr. President," said the secretary of state, "we have chosen this man not for valor but for reliability. I think it was our intention that whoever we sent should attempt no heroics which would anger Slavinsky. I think Lieutenant May should be so warned."

"Yes, yes," said the President. "This is of the utmost importance. You are only to return if Slavinsky permits it. You are to attempt no heroics. For if you failed in them we would pay the price. Am I understood in that, lieutenant?"

Angel said he was.

"Now then," said the president, "the space-ship is waiting and, when you have picked your two crewmen and Commander Dawson gives the word, you can leave. These despatches"—and he took up a sheaf of them—"are for General Slavinsky and may be considered important only as routine diplomatic exchanges."

Angel took the package and stood up.

"One thing more," said the admiral. "You will be carrying a small pilot rocket aboard. You will take the rolls from the automatic recording machines, place them in it just before you reach the Moon and launch the missile back to Earth before landing. If we have enough data, though it is a forlorn hope, we may some day fight Slavinsky."

"I doubt it," said the secretary of state, "but I won't oppose your thirst for data, admiral."

They shook hands with the President and then Angel found himself back in the Cadillac, rolling through the rush-hour traffic of Washington. Soon they made it to the Fourteenth Street Bridge and went rocketing

into Virginia to a secret take-off field.

"Could you get me Master-sergeants Whittaker and Boyd?" said Angel timidly to the general.

"I'll have them picked up on the way by the barracks," said the general. "No word of this to anyone though."

"Yes sir," said Angel.

When darkness had come at the secret field Commander Dawson turned up with a briefcase full of calculations from the U. S. Naval Observatory and began to check instruments.

"Two o'clock," he told the general.

"Two o'clock," said the general to Angel.

Angel walked out of the hangar and joined Whittaker and Boyd.

Whittaker spat reflectively into the dust. "I shore miss the brass band this time, lieutenant."

"And the dames," said Boyd, "Boy how I'd like me a drink. We got time to go to town, lieutenant?"

Angel was walking around in small circles, his beautiful face twisted in thought. Now and then he kicked gravel and swore most unangelically.

THEY were handing Slavinsky the world, that was that. And without a scrap. The slaughter of a Russian war was nothing to anyone compared to the loss of Chicago. Maybe it was logical but it just plain didn't seem American to be whipped so quick.

Suddenly he stopped, stared hard at Boyd without seeing him and then socked a fist into his palm.

"What's the matter?" said Boyd.

Angel went into the hangar where the big ship was getting ready to be rolled out on the rails now that her loading was done.

"General," said Angel, "as long as I may never have the chance again—and being young makes it pretty hard—you might at least let me go to town and buy a couple quarts for the ride up."

"You know the value of secrecy," warned the general. And then more kindly, "You can take my car."

Angel stood not. Some fifty seconds later the Cadillac was heading for town at speeds not touched in all its life before.

Whittaker and Boyd, in the back seat, bounced and applied imaginary brakes.

"Listen you guys," said Angel. "Your necks are out as much as mine"—he avoided two street cars at a crossing and screamed

on up toward F Street—"and I ought to ask your permission."

"We're going to take a load of food to Slavinsky on the Moon. Very hush-hush, though the only one we've to keep secrets from now is Slavinsky. But I intend to make a try at knocking off that base. Are you with me?"

"Why not?" said Whittaker.

"Your party," said Boyd.

Angel drew up before an apartment house on Connecticut Avenue and rushed out. He was back almost instantly with a grip and considerable lipstick smeared on his cheek.

Boyd thought he heard a feminine voice in the darkness above calling good-by as they hurtled away. He grinned to himself. This Angel!

Their next stop was before a drug store and Angel dashed in. But he was gone longer this time and seemed, according to a glimpse through the window, to be having trouble convincing the druggist. Angel came out empty-handed and beckoned to his two men.

Whittaker and Boyd walked in. A young pharmacist looked scared. There was no one else in the place.

Angel walked around behind the pharmacist. "Close the door," said Angel. Three minutes later the pharmacist was bound quite securely in a back closet.

Angel ransacked the shelves and loaded up a ninety-eight-cent bag. They turned out the lights and closed the door softly behind them and went away.

Twenty-one minutes later a young Chemical Warfare classmate of Angel's was hauled from the bosom of his family and after some argument and several lies from Angel permitted himself to be convinced by SecNav's Cadillac and went away with them.

They halted at an ordnance depot in Maryland at eight-fifteen and the young chemist opened padlocks and finally, with many words of caution, delivered into Angel's hands three small flasks.

It was well before two when Angel and his men came back to the field. They alighted with their burdens and whisked them into the ship.

"Find that drink?" said the general indulgently.

"Yes, sir," said Angel.

"Good-boy!" said the general, chuckling over having been young once himself. He had not missed the lipstick and had applied

the school solution.

Commander Dawson was growling and snarling around the ship like a vengeful priest. Behind him came two quartermasters carrying the precious standard chronometer and spyglass.

"Better get aboard," said Dawson roughly. "And don't monkey with those instruments. We're almost ready." His scowl promised that it didn't matter to him what happened: *this* time he was going to get that rocket upstairs!

CHAPTER III

Moon Meeting

STARK death was the Moon. No half-tones, no softness. Black and white. Knife-edged peaks and sharp rills. Hot enough to fry iron. Cold enough to solidify air. Brutal, savage, dead. Strictly Moussorgsky.

A place you wouldn't want to go on a honeymoon, Angel decided.

For all of Dawson's growling they had not hit the target exactly. Slavinsky had drawn a big, lamp-black X below the U.S.S.R. on a plateau near Tycho but the ship had hit nearly eight miles from it.

Hit was the word, for if they had not landed in pumice some thirteen feet thick things would have been dented. The abrasive dust had risen suddenly and drifted down with an unnatural slowness.

For a week they had been lying around in the padded cabin, experiencing space sickness, worn out from accelerations and decelerations, living on K and D and C rations and cursing the engineers who had drawn such a thoroughly uncomfortable design.

Angel had sent off the pilot rocket as ordered, filled with the recording rolls, but he had added a few succinct notes of his own which he hoped the engineers would take to heart. Such things as the way air rarified up front on the take-off and nearly killed Boyd.

Such things as drinking bottles that wouldn't throw water in your face when you got thirsty. Such things as straps to hold you casually down when your body began to wander around and helmets to keep your head from cracking against the overhead

when you got up suddenly and found no gravity.

But for all the travail of the past week the Angel was bright-eyed and expectant. It was balanced off in his mind whether he would kill Slavinsky by slow fire or small knife cuts.

For Angel had very far from enjoyed being cheated of the glory of being the first man to fly to the Moon and he distinctly disliked a man who would make a slave country of the United States. Prejudiced perhaps, but the Angel believed America was a fine country and should stay free.

Boyd raked up three packages, tying a line and a C ration can, buoy-like, upon it. Whittaker got a port open, inside pane only, and looked at the scenery.

He turned and spat carefully into another can—experience had taught him, this trip—and then put on his space helmet, screwing the lucite dome down tight. He glanced at his companions.

Angel was having some trouble getting into his suit because of his hair, but when he had managed it he led the way to the space port. The three of them crawled over the supplies and entered the chamber, shutting the airtight behind them.

They checked their air supplies and then their communications. Satisfied, they let the outer door open. With a swoosh the air went out and they began their vacuumatic lives.

It was thirty feet down but they didn't use the built-in rungs. Angel stepped out into space and floated down like a miniature spaceship to plant his ducklike shoes deep into the soft pumice. Boyd followed him. Whittaker, carrying debris in the form of cans and bottles in his hugely gloved hands, came after.

As though on pogo sticks the three small ships bounced around to the rear of the space ship. Boyd threw the three packages down and stamped them into the pumice. Whittaker scattered the debris around the one can which was the real buoy marker.

The discarded objects floated in slow motion into place and lay there in the deathly stillness.

They looked around and their sighs echoed in their earphones; one to the other. No tomb had ever been this dead.

They were landed in a twilight zone, thanks to Dawson. And if their suits—rather, vehicles—had not been so extremely

well insulated they would already be feeling the cold.

The sky was ink. The landscape was a study in Old Dutch cleanser and broken basalt. A mountain range thrust startlingly sharp and high to the west. A king-size grand canyon dived away horribly to their south. A great low plain, once miscalled a sea, stretched endlessly toward Tycho.

Two miles away a meteor landed with a crash which made the pumice ripple like waves. A great column of the stuff, stiffly formed in an explosion pattern, almost stroboscopic, stood for some time, having neither gravity nor wind to disperse it.

A few fragments patted down, making new slow motion bursts. But the meteor had landed at ten miles a second and they all winced and looked up into the blackness. Having atmosphere was a subtle blessing. Having none was horrible.

HAVING looked up, Angel saw Earth. It was bigger than a Japanese Moon and a lot prettier. It had colors, diffused and gentle, below its aura of atmosphere. It looked fairylike and unreal. Angel sighed and thought about his favorite bar.

They snowshoed around the ship again. The last of the sun, half visible like an up-ended saucer made of pure arc light, came to them through their leaded lucite helmets. That sun was taking a long, long time to set. Hours later it would still be sitting there. Things obviously took their time on the Moon.

Whittaker, unable to spit, was having difficulties. Heroically, he swallowed his chew.

They weren't on the same wave length with the Russians and the approaching detachment came within a quarter of a mile before they saw it. The group was tearing along, bouncing like a herd of kangaroos, sending up puffs of pumice at each leap. They came alongside the ship in a moment and, without any greeting to the newcomers, scrambled up inside.

The officer came back and peered out at the horizon and then ducked in again. It was very difficult to see through the metal helmets of these people but they looked hungry.

Angel went up and stood in the space door. The Russians had left the inner airtight open and all the atmosphere had rushed from the ship. Like madmen they were ripping

at the boxes and stuffing chocolate and biscuit into their capacious bags. This was evidently personal loot and the way they were going at it looked bad for the boys who had stayed behind.

Nobody paid any attention to Angel, not even glancing his way, until the officer motioned Boyd and Whittaker into the ship and then unceremoniously herded the three of them into the forward hold and bolted a door on them.

Through a forward port Angel saw the two tractors approach. They were made of aluminum mostly, and they seemed to run out of a propane type tank. They threw hooks into the skids of the ship and, their huge treads soundlessly clanking, began to yank the ship toward the king-size grand canyon.

After an hour or so of tugging they came to the brink and were snaked around until they fitted on an oblong metal stage which, carrying tractors and all, promptly began to descend.

The ship lurched in the lower blackness and then lights flared up by which the stage could be seen to rise into place above them.

Eager crews of spacesuited men swarmed out of an airtight set in a blank wall and in a few moments a stream of supplies was being shuttled, bucket-brigade fashion, toward the entrance.

It was a weird ballet of monsters in metal. The supplies, so heavy on earth, were tossed lightly from monster to monster which added to the illusion. Big crates of dehydrated sailed along like chips.

The unloading took three hours and eight minutes by Angel's watch and then the line cleared away. Belatedly somebody thought of the crew and unlocked the door. At pistol point they were rushed out, down the ladder and to the airtight. The gutted ship stood forlornly behind them, their only contact with home, associating now with six other monsters, the Stars and Stripes outnumbered.

In the dank corridor behind the second airtight men were standing around in various stages of relaxation and undress. They kept halting to gloat over the supplies which left one Russian still in helmet but without pack or gloves, another stripped to underwear, a third in pack and all. Nobody glanced at them.

Their guard shoved them into another tunnel and they wound down a gentle grade between basalt walls until they came to another series of airtights. At the end they

were shoved into a chamber walled all in metal, a sort of giant strongbox with doors at each of the five sides.

A desk made of packing boxes stood in the center. A rubber mattress bed was several feet behind it. A crude hat tree bore the fragments of a space suit. The place was a combination of arsenal, bedroom and office, sealed in, double-bolted, entrenched and triple-guarded.

AT THE desk sat a singularly dirty man, covered with matted black hair, clad in pants, glistening with perspiration and scowling furiously under crew cut bristles.

This was Slavinsky, Vladimir, one-time general of Russia, currently dictator of the world.

The guard had got out of his clumsy space helmet. "The ship crew, Ruler," he said in English.

Whittaker had taken off his helmet and was biting at a plug of Ole Mule. Boyd was examining his fingernails.

Only Angel was still fully suited and helmeted.

"Who is commander?" barked Slavinsky, black eyes screwing up.

Boyd glanced up.

"I am Lieutenant Cannon Gray," he said with blue eyes wide.

"Don't forget the despatches, lootenant," said Whittaker.

Boyd tossed the packet on the desk. It floated down.

"I am displeased," said Slavinsky.

"I'm sorry to hear it," said bogus Gray.

"I'll sure tell the President when I get back."

"You're not going back!" said Slavinsky. "You have failed."

"Looks to me like we brought a lot of supplies," said Boyd.

"You brought no cigarettes!" said Slavinsky.

"Well, if that ain't something," said Boyd.

"I tell you them quartermasters ought to be horsewhipped and that's a fact. Well, well. No cigarettes. You sure you checked the inventory, general?"

"The title of address is 'Ruler!' And I'll have no questioning of our actions. You brought no cigarettes and there's not a single pack on the Moon."

"Well, if it's okay with you," said Whittaker, "we'll just trot down and fetch you up a couple cartons."

"That's impertinence! Lieutenant, have

you no control over your men? Are you certain we have emptied all storage compartments of your ship?"

"Well, can't say. Back in the tube room we had a little layout for the return trip but you wouldn't want to take that away."

"Aha!" said Slavinsky, jumping up to his full five feet.

He pushed down a communicator button and rattled orders into it.

Just as he finished a small bespectacled man entered timidly, his hands full of reports. "Ruler, I have just checked the supplies and I find them safe. I began when the first case entered and have just finished. The food is not poisoned."

"So!" said Slavinsky to Boyd. "You knew better than to trip us up, did you. Ha!"

"I got to send my report to the President," said Boyd.

"I am afraid," said Slavinsky, "that I shall have to attend to that. Now, to business. You will be separated from your men, of course. And then men we need in our labor gangs. We have all too few men, you see."

"But you, as an officer, according to the usages of war, need not work outside but may have some light job. The meteors have been bad lately and we have lost several people. Guard, take this officer to a cell and put the men to work on the missile emplacements instantly."

"With a guard, Ruler?"

"No, blockhead. Where would they go? Ha, ha. Yes, indeed. Where would they go?"

Angel had been half through the act of unscrewing his helmet. Now he hastily replaced it. He and Whittaker were thrust outside and in a moment found themselves in the hands of a non-com who was organizing a work party.

A radio technician came up and adjusted their radios to proper wave length and in a moment they were drowned in Russian.

Angel sighed with relief and looked back at the last of the doors which had led out from Slavinsky. Ruler of the world, was he?

Well, maybe he could manage to get some good out of it. But as for Angel, give him control over a bar stool of the Madrilon and Slavinsky could keep the Moon.

Musing, he found himself in a column and outward bound.

CHAPTER IV

Wait for the Night

IT WAS still twilight on the surface and the earthlight was quite bright even where the blackness of airless night lay upon the stabbed and pitted world. The pumice-covered plains were upheaved into abrupt cliffs and slashed apart by ugly chasms.

It was a nightmare land where one bobbed in levitation-like gyrations, skating over soft and treacherous pumice bogs, plowing through the basalt dust of rays, all under an indigo sky.

Meteors landed soundlessly with the enormous explosions of bombs and each twenty-four hours millions fell. Sometimes clouds rose up to catch the higher rays of the slow-motion sun and hung there, twisting the light into colors.

Man was experiencing his first contact with the wild, garish, infinitely dangerous power of space, billions of times as strong, as capricious, as his ancient enemy the sea.

All was so slow, so quiet, so vastly untenanted. And far away the aura-crowned Earth hung silent, watchful in the sky, satellite of this dead world.

Their imperishable tracks stretched behind them as they drifted toward the emplacements. It was difficult to believe that these weird metal things were containers for human beings.

In ages to come, in scenes like these, men would sicken and madden and die just as the crews of tempest-driven barques have gripped insanity in the ages past.

Angel plowed through pumice and climbed the final bastion of the emplacement.

The great pilotless missile was shielded by an overhanging cliff against all but a freak meteor. Through a small opening this sleek white tube could fly, rushing to the execution of perhaps a million human beings. It stood quietly, waiting. It had all the dignity of the slave machine. It could wait.

Painted scarlet on its nose was—

CHICAGO

There was a buzz of cheerfulness from the Russians as they got out of the open. Eight of their number here had died—two from sun, one from cold, one from suffocation,

four all at once under the smash of a thousand-ton meteor.

The mathematician amongst them sat down and began clumsy figures with his mitten-held pencil. A surveyor set up a transit. They were about to complete the orientation and construction of the rail tracks for Chicago.

Angel supposed he would remain here under guard. But the captain had ideas.

"You Yankees! There is rail material dumped in a small crater a few hundred yards from here. We have too few men as it is. You will begin the task of bringing them."

The ground vibrated for an instant as a meteor struck above.

Angel said, "Come on, Whittaker."

They crawled back over the entrance bulwark and regained the still twilight of the outside.

For a moment they stopped and adjusted the radio dials on each other's helmets.

"I hope Boyd is all right," said Angel.

"I hope we can find the place," said Whittaker.

They turned and in great leaps began to scout for the incoming tracks of their ship. There were many such tracks and Angel had to take a quick orientation. Then they found theirs, neither older nor younger than any other tracks, and began to race back down it, taking broadjumps of forty feet with every step, trying to keep from sailing sky-high. The pumice was indifferent footing and clung to their duck shoes, leaving a slowly settling stream of particles in the half-light behind them.

They had gone five miles before they saw anything on their backtrack. And then it was obvious that somebody in the work party had begun pursuit after missing them.

The pursuit was specklike, unhurried as the weasel stalks. For who could find board and room on the Moon?

Angel's breath was hurtful in his lungs. Whittaker was lagging and the officer stopped to let him catch up. It was then he saw the motor sled. It was coming fast, so fast he could see it grow.

Desperately, Angel sprinted on. Ahead, with a yell of delight, he saw the end of the tracks and the strewn debris. He grabbed cans one after the other until he found the right one and hauled up its string. The first package came to light and then the string broke.

WHITTAKER dived headlong into the pumice to recover it. The second and third packages came to view.

Angel glanced back. The motor sled was almost there. He wrenched off the ties of the heaviest packet. Out rolled the sleek bombs of a bazooka and the instrument itself.

Whittaker seized the barrel and placed it over Angel's shoulder. Angel found the trigger and knelt, sighting on the sled. Whittaker thrust the first rocket in place.

The sled was quite close now, trying to brake, throwing up lazy clouds of pumice.

The rocket trail was red flame in the twilight. The explosion was soundless but like a blow on the chest. Scarlet fire sucked sled and men into its ball and then spewed them forth in fragments which fell lazily, drifting through the clouds.

Angel got up and would have mopped his brow until his hand, striking against the helmet, reminded him where he was. He turned to find that Whittaker was already slinging the string of grenades over his shoulder.

From the third packet they took the Tommy-guns and ammunition. Armed then and in haste they started the backtrack.

Had they been able to afford more oxygen they would not have been so tired. Weightless walking took little energy and their burdens were feathers. It was rather insecure to feel a Tommy-gun so light.

They oriented themselves and then Angel led off toward the chasm. They gained the shelter of this just as a meteor seemed to explode behind them. But it wasn't a meteor. It was a rocket projectile of small caliber.

They floundered down to a ledge in the giant canyon and then, like two mountain goats of great power, began to leap from outcrop to outcrop.

They made time. The canyon had a bend which would protect them until the last.

But Chicago was there.

A slug struck the bazooka barrel and glanced soundlessly away. They instantly pressed against a jagged break in the wall and Angel adjusted his burdens. He looked up and saw that he could climb.

With a motion to Whittaker to stay put, Angel went up the basalt and found himself crawling over an unburned meteor of glittery sheen. There were diamonds in it.

On top he could crawl forward and peer down over the edge at the Chicago rampart. He glanced ahead and saw that there were

fifteen other emplacements but the main entrance to the tunnels interposed.

Cautiously he laid down his weapons and then crept to the edge again, grenades in hand.

With sudden rapidity he teethered out pin after pin and pitched. It was like salvo ranging. How hard it was to estimate throwing distances!

But the cliff wall let them billiard. One, two, three, four they dropped into the emplacement.

He could see space suits down there scrambling back. Any slightest wound would be fatal. A slug tipped his mitten and then the first grenade went up.

The emplacement rocked. Four blasts belched out stone. The imperfectly held rocks folded in and an avalanche began a leisurely curtain into the bottomless canyon. There was no sign of the Chicago entrance.

While particles still drifted, Angel waved to Whittaker and they swiftly resumed their goat travel. The huge steel faces of the main tunnels remained solid and impassive, proof even against meteors.

No shot came.

Whittaker cautiously drew up to their faces until he could touch them. He found no chink in them.

"Up!" said Angel.

They scrambled and leaped and finally came to the plain. A rocket missile shook the ground near them and covered them with dust. They dived headlong into a crater.

Whittaker lifted his head above the rim. "Emplacement to repel ground troops. On that crater rim."

"They must keep one manned continually as an alert," said Angel. He thoughtfully sat down. Somewhere a meteor shook ground. The tip of the last rocket explosion was still rising, catching the sunlight in a turning glitter.

"The only available entrance into the tunnels must be through that guarded emplacement," said Angel. He looked up. "There's very little sun left. It will be dark in half an hour."

Whittaker nodded inside his lucite casque. "It'll get awful dark, lieutenant."

"Fine," said Angel. "Take bearings on the emplacement from the two rims of the crater. A man could get hurt stumbling around here without lights."

Whittaker got busy with the engineer's companion, an azimuth compass. It worked

fairly well, though heaven knows where the magnetic pole of the Moon might be. He made a small chart of prominent land marks which would be easy to find in the dark.

Now and then a rocket would explode along the crater rim but such was the gravity problem that the alerts did not attempt the mortar effect.

Angel put a piece of chocolate into the miniature space lock of his helmet, closed the outer door, opened the inner one with his chin and worried it dog-fashion out of the compartment. He ate it reflectively.

"I hope Boyd is all right," he said.

CHAPTER V

Now I Lay Me . . .

DARK came as if someone had shut off an electric light in a coal cellar. The moment was well chosen. Dark wouldn't come in such a fashion to this place again for twenty-nine and a half days, nor would it be light again until half that period had passed.

Soon it would get very cold, down to minus two hundred Centigrade. These space suits were designed for that but they used up their batteries very quickly despite the eight thicknesses of asbestos on their out-sides.

"Let's go," said Angel. "They may try a foray on their own." The earthlight was wiped out by their colored helmets.

As nearly as they could calculate they covered the proper chart distances in a wide triangle which would bring them up the side of the alert post.

Soundlessly they made their debouch, fortunately having to take no care of tumbled meteor fragments beyond falling. And a fall was far from fatal.

They came to the slope and groped their way up.

Something round bumped Angel. He felt it and found it to be a metal pole. Some sort of aerial or light stand. He wondered if the Russians had shifted to other helmets which would permit them to see him in the earthlight. That he was still alive made him think not.

He felt the manmade smoothness of the pit edge and drew back. He stopped Whit-

taker and toothed out the pin of a grenade.

Rapidly they hurled four. The pumice shook like jelly under them under four explosions.

They dived over the edge. Only one Russian was there and nothing much of him was remaining.

"They tried a foray," said Angel. He threw on his chest lights and the metal escape door gleaned.

They lifted it swiftly and plunged down the steps, closing it behind them. An airlock was before them.

"Keep your helmet on," said Angel. He went through.

At the third door they paused and took the safeties off their Tommy-guns. They went through alertly. But no one barred their way and they entered the main tunnel. To their right they could see their big ports beyond which stood their ship.

Supplies were scattered along the walls. Space suits hung on pegs. Weapons were racked.

"Come along," said Angel.

They confronted the first series of doors which led to Slavinsky. In the first, second and third chambers they found no one. The fourth was locked.

Angel waved Whittaker back and from the second chamber sighted with the bazooka on the locked door.

"Look alive in case anybody comes," said Angel.

Whittaker placed the missile and then stepped aside, Tommy-gun ready.

The trajectory of the rocket flamed out. Smoke and dust dissolved the far door. The echoing concussion buffeted them, unheard through their suits.

Angel was up with a rush, cleaving the billows of cordite. His charge brought him straight into the inner sanctum.

And there, pistol gripped but flung back was Slavinsky.

The black eyes glared. The yellow teeth showed. Whatever he yelled Angel could not hear. The pistol jerked and a cartridge empty flipped up.

Angel chopped down with the Tommy-gun.

And discovered the engineering fact that metal still fifty degrees below zero Centigrade does not work well. The firing pin fell short.

The lucite casque fanned out a gauzy pattern but the slug did not penetrate, leaving only a blot.

Angel threw the gun straight at Slavin-

sky's head. Slavinsky ducked the weapon. But he did not duck the chair which followed it. He staggered back, losing his grip on the pistol.

In Angel's radio, Whittaker's voice yelled, "Three Ruskies are comin'!"

"Use a grenade!" cried Angel. And he flung himself bodily upon Slavinsky.

The metal mittens were clumsy and could not find the general's throat. Slavinsky got a heel into Angel's belt and catapulted him with a smash against the ceiling.

Angel flung himself back. Slavinsky's naked torso was nothing to grip.

"Get him!" howled Whittaker. "They got us penned in!"

Angel grabbed for the sling of the Tommy-gun. The weapon leaped up, amazingly light. But it had mass and mass counted. He drove the butt through Slavinsky's guard, drove in the teeth, the nose, brought sheets of blood into the eyes, crushed the jutting jaw and obliterated the face.

He spun about to find Whittaker holding a bulging door. Angel reached into his kit and pulled out a flask.

"Let them in!"

"They're in!" roared Whittaker.

The bottle of Lewisite exploded against the wall beside the first Russian, spraying out over his naked skin.

The rest plowed forward. They plowed, caught their throats, strangled and dropped.

ANGEL turned and popped a space cloak and helmet on the remains of Slavinsky. He wanted him alive before the gas reached clear across the chamber. "Stay here," said Angel. And he plunged out.

He found Boyd in a cell, safe enough, carefully garbed in his space helmet.

"It was horrible," said Boyd. "The fools grabbed those cigarettes like you said they would. They distributed all of them to everybody but Slavinsky and he hits marijuana instead. And then they started to light up. Even them that didn't get to take a puff got it from the rest. Lootenant, don't never feed me no Lewisite cigarette!"

"Anybody else you know of back here?" said Angel sweetly.

"Whoever survived rushed up to where you came in. Geez, lootenant, what if that had missed?"

"We'd be working in St. Peter's army," grinned Angel. "Keep that helmet on. This whole place must be full of gas."

They went back to Slavinsky's office and from there made way into the communications center.

Boyd set the wave lengths and called.

When they had Washington as though they were Russians, Angel took the aircraft code from his kit and began to give them news that Russia wouldn't know in time.

"We have met Slavinsky," he coded. "I am in possession of this objective and require reinforcements immediately. The enemy is dead except for stragglers outside who will die. Tell the highest in command to send force quickly. We are victorious!"

* * * * *

Whittaker put an affectionate hand on Angel's shoulder and shook it gently. Angel felt terrible.

"Lieutenant," said the surgeon, "you'd better come around. It's nearly time."

The watch on his wrist gleamed as hugely as a steeple clock and said, "Zero three fifty-one" in an unnecessarily loud voice.

He was dressed somehow and they shoved him into the corridor, which was at least half the distance to Mars. A potted palm fell down and became a general.

"Fine morning, fine morning, lieutenant. You look fit. Fit, sir. No clouds and a splendid full Moon."

The aide was brilliant. Angel knew him well. The aide had been an Upperclassman when Angel was at the Point.

"Beg pardon, sir," said the aide sidewise to the general. "But we've just time to brief him as we ride down. Here, this way, lieutenant."

When they were in the car the aide said, "You have been thoroughly briefed before. But there must be a quick resumé unless you think you are thoroughly cognizant of your duties."

Angel would have answered but all that came out was a groan.

"You will phone all data back to us. Our tests show that the wave can travel much farther than that. Anything you may think important, beyond maps and perhaps geology, you are permitted to note and report."

"Under no circumstances are you to attempt to change any control settings in your ship. All instructions are in this packet."

Angel shoved the brown packet into his pocket with a twinge of pain. *What* a hang-over. And what a dreadfully confused night he had had!

Colonel Anthony got him out of the car, through the crowd and up the ladder.

Whittaker was standing there, indolently chewing tobacco. Metal glinted behind them in the interior. Commander Dawson of the Navy prowled around the ship and then went to take his post.

"You've got a week to sober up, my boy," said Anthony.

"I'll be fine," said Angel, managing a smile.

Angel stepped from the ladder to the platform.

"Board!" shouted Dawson.

Floodlights and cameras and upraised

faces. There was a hushed, awed stillness.

Boyd had a big pair of glasses fixed upon the full Moon. He was adjusting them to get the proper focus. Suddenly Angel grabbed the glasses away and stabbed them at the brilliant orb.

With a little sigh of relief he gave the glasses back and with a wave of his hand to the crowd, entered the ship.

The door closed. The spectators were waved hurriedly back.

There was a crash of jets, a flash of metal. The space ship was gone.

In spite of nightmares and hangovers, Man had begun his first flight into outer space.



Wonder Oddities

WHEN you kick the gong around you are literally doing a messy job on the atoms it contains, according to Doctors B. L. Averbach and B. E. Warren of the Massachusetts Institute of Technology. The atomic structure of any metal is markedly disarranged by a hard blow. Metal blocks were recently placed in an X-ray beam to measure the amounts of atomic energy radiated. Those blocks which had been damaged by blows scattered their energy far less evenly than unharmed ones.

OFFERED by Dr. J. Robert Oppenheimer, famed atom man and director of the Institute for Advanced Study, Princeton, is a new "timetable" for the coming of age of atomic power. Within three years, he predicts, at least two reactors will have been built. Their experimental phase will be over within a decade. And it will take at least twenty years for atomic power to replace current water and mineral sources in any appreciable degree.

NO bar to space-ship navigation is the Einstein equivalence principle, says John J. Gilvarry of North American Aviation, Inc. Others have advanced the theory that an astrogator, whose instruments proved useless in space, without radio connections to Earth or windows, would be helpless according to Einstein. Mr. Gilvarry points out that a solution to his problem is possible by application of formulae in use to determine the fuel cut-off point in the V-2 rocket.

DOCTOR George Gamow, mathematical physicist of George Washington University, has used recently-learned knowledge of the properties of elemental atomic nuclei to determine the proportionate age of the galaxies. According to Dr. Gamow, the galaxies were formed from compressed neutronic gas and our universe took just about one tenth of its present age to form itself.

EXPERTS who make their living by guessing how much a man or woman weighs won't have to worry, but it is of interest to scientists that a human being weighs more on hot days than on cold ones. The difference, for a 150-pound man, amounts to about a quarter of an ounce.

RHYNODON TYPICUS, or the whale shark, is the largest living fish known to science. It has been known to grow to a length of fifty feet, which is good sized even for many species of whales, which of course are not fish but mammals. Unlike most of the rest of his ferocious species the whale shark is not ferocious. We still prefer flounder!



The boy looked at Mr. Franklin, who was holding what was really his shell

Schizophrenic

By NOEL LOOMIS

TOMMIE BASSFORD was concerned over the steady frown on his father's forehead and a little bit hurt because his father hadn't noticed him for at least an hour. At the age of three, Tommie didn't understand a lot of things, although sometimes he felt them very keenly. Sometimes a person's unpleasant mood would be more painful to him than a spanking—well, that is to say, an ordinary spanking.

He had heard his father say only last night, "It's a chance to make a million—if I can trust him. And it won't take but a month," he had said wistfully. "We could move up to the mountains or down to the seashore. You wouldn't have to worry about Tommie getting picked on by the big boys next door, and you wouldn't have to quit playing bridge to come home when you lose your five dollars." His father had looked at mother fondly. Then he had sobered.

Amazing little Tommie Bassford not only splits into more than one personality mentally—he does it physically, too!

"The only thing is—if Pickens isn't on the level, then we can lose what little business we have, just as fast."

Tommie thought maybe he could help his father. He gathered up his whole sun-energy set from the center of the big front window where he liked best to play. He pulled it across the floor in quantum jerks, moving backward in a sitting position, pushing himself by digging his heels into the floor and then straightening his legs. That way he could make it all in one trip, hugging the sun-energy set to his stomach until he jammed his back against his father's chair.

He was disappointed that his father did not look down at him and perhaps pat him on the head. It was most unusual. But Tommie set up his blocks and then pressed the button and watched the reactions start all over again. He watched carbon 12 go into nitrogen and then into oxygen and then into nitrogen 15. Up to that point it went very well, but when those four hydrogen nuclei, represented by four glowing green balls, were supposed to combine into one helium nucleus, something went wrong. They didn't combine right. They smacked into each other with a violent report and disappeared.

AT THIS moment Tommie's father came to life with a startled jump. He said a word that Tommie, at his age, had never yet dared to say except to himself, because even though he was a prodigy, his mother didn't allow him to say da-- he caught it just in time.

Tommie was glad, anyway, that his father had quit staring at the paper. Tommie stood up to receive the gentle pat on the head that he usually got from his father's big hand, but as he turned around, astonishingly enough, his father smacked him on the seat, and, through his red linen shorts, it stung.

"Will you please take those confounded atom blocks and your one-seventy I. Q. into the back yard or somewhere, so a man can have some peace?" His father tried to sound exasperated, but Tommie didn't think he really meant it.

But Tommie got on his knees and gathered the whole set to his stomach and hoped there wasn't any dirt on them to get on his white waist. Then he went out, very disappointed and even a little hurt—in fact, his eyes felt a little watery—because he thought if dad would tell him what was the trouble, he could help dad figure out something.

Mother was showing talky Mrs. Jones the new disintichute that disposed of everything that was waste—soiled clothes, dirty dishes, used silverware. Tommie wondered why they called it silver. Certainly there wasn't any silver in it, as everything was plastic now. Everything, that is, but very special things, like his red linen pants.

Mother smiled at him vaguely, and Mrs. Jones smiled too, but Mrs. Jones had a sharp, searching look in her eyes that made it seem as if she was trying to find something wrong so she could punish him. Tommie didn't care for her. She wouldn't have any right to send him into scrub his hands again.

"Come here, Tommie," she said in a high cooing voice, and made a move for him. But Tommie felt a strange, almost violent repugnance toward her. He backed away and went sideward toward the kitchen door. It opened, and he lifted his feet high to get over the sill and very nearly lost his balance doing so.

That annoyed him, too. Being a prodigy was all right if one had a body to go with it. When a boy had a ten-year-old mind it was irritating to have a three-year-old body as clumsy as the body of a baby.

He lost an orange-colored electron just outside of the door, but he let it lie there for a moment. Mrs. Jones was too close to the door. Maybe Mrs. Jones would go back into the front room where dad was worrying so much. Secretly Tommie chuckled. Dad didn't like Mrs. Jones any more than Tommie did. He'd send her home in a hurry.

Tommy set up his blocks and got some spare nuclei out of the box and started the reaction going again. It puzzled him a lot, why the hydrogen nuclei didn't combine properly. There must have been some unusual influence somewhere. In the two days he had had it, he hadn't been able to complete the carbon cycle once.

Bennie, next door, had a set, and when Bennie tried it, it always worked fine. Bennie never had lost a nucleus by explosion. Maybe there was something wrong with Tommy's set. He'd get Bennie to try it—and maybe Bennie would let Tommie try his set.

Tommie sat there in the white sand, watching the interlaced orange-glowing orbits of the electrons and the broad green paths of the hydrogen nuclei. The sun was warm on Tommie's back and the Baltimore orioles were singing in the elm tree almost over his head. Across the high electronic fence he

could hear the bigger boys playing ball in Bennie's yard.

SUDDENLY the four hydrogen nuclei, flashing at half light-speed in their four orbits, went together and disappeared in the usual green flash and with the customary loud report. Tommie was thankful the explosion didn't sound as loud out in the yard as it had in the front room under dad's chair, although secretly Tommie liked it better in the house because of that very fact.

The only thing was that dad wasn't in a very good mood today.

Tommie watched the orioles sweeping around the tree-top, and the papa oriole's orange plumage, flashing in the sunlight, reminded him of the orbit of an electron. Then he remembered that he had dropped an electron just outside the kitchen door.

He got up laboriously—he was so solid his legs had a hard time holding him up, sometimes. He went to the door and leaned over to pick up the electron. He heard the swish of the door as it opened and then the high cooing of Mrs. Jones' voice as she bore down on him.

"Oh, that dear little boy. I simply must squeeze him."

Tommie stood up suddenly, so suddenly he lost his balance and sat down on the grass. Mrs. Jones reached for him, and that strange feeling of repugnance he had for her grew so powerful that it almost smothered him. He squirmed to get away from her, but he was trapped. She touched him, and his body quit squirming because mother wouldn't like it, but in his mind he writhed. It almost seemed that he could tear himself away from his body.

Then he did! Just how he didn't know, but suddenly he was standing a couple of feet to one side, watching Mrs. Jones holding the arms of his first body. He looked down at himself. Yes, he was in a body, too, and he was wearing red linen pants. This body didn't seem quite as solid as his first, but solid enough. He looked up at Mrs. Jones triumphantly.

He was surprised to see her drawing back with her mouth open like the hole in the distichute. Her eyes were sticking out and her eyebrows were almost up to her hair.

"Oh! He-he split!" she shrieked. "He-he's got two bodies!"

Tommie was very amused at her antics. He

looked over and smiled at his mother but she too was staring at him with something like horror.

Then Mrs. Jones did something Tommie couldn't understand. She went to his mother and put her arms around her and cried and said, "Oh, my dear, I'm so sorry for you. I didn't know you had this burden. All of us have our crosses to bear—the atomic age has left such dreadful marks on civilization—but, oh my dear!" She let out a hearty bawl, and Tommie quit being amused and began to be very disgusted. She looked at him from under one arm, half afraid, he thought, and then she turned back to Tommie's mother. "My dear! A schizo—schizo—"

"Schizophrenic," said Tommie Number One helpfully.

"Split personality," Mrs. Jones sputtered. "But physically! Oh, my da—"

Tommie's mother was disengaging herself. "Why don't you go home and make yourself a nice cup of hot tea, with maybe just a touch of—" She hesitated.

"Arsenic," Tommie thought promptly. He became one little boy again.

"Ar—" She caught herself and looked at Tommie, horrified. "Just a touch of brandy," she said.

Mrs. Jones looked bewildered. Oh, this was fun, thought Tommie. He'd known for some time that he could mentally suggest things for his parents to say, but he'd never tried it so openly before. He knew one thing, though. He'd better be plenty careful with this power, or he'd get walloped. In fact as he thought about it, he didn't feel too sure about the arsenic deal.

MRS. JONES retired in confusion, and Tommie went back to the sun-energy set. But when his father and mother were both outside, and mother was saying as if she were shocked, "Yes, he definitely split in two. I saw him with my own eyes."

His father looked serious—then he chuckled. "No doubt you would have done the same thing, if you could have. But I wonder why." He took Tommie's arm, somewhat gingerly. "Hm." He took the other arm. "He doesn't do it when we touch him. It must be her repellent personality, or some phase of it. Insincerity, do you suppose?"

Tommie himself guessed that was it. Mrs. Jones never said what she meant, and never meant what she said. That was what made Tommie writhe.

His mother and father talked it over, and in the end they didn't seem too worried about him. "We'll see," said his father, "what develops." Then his father began to walk around the yard, stretching and sunning like an orange oriole. He finally sat down in the lawn-chair, and Tommie's mother sat beside him, and that worried look came back on his father's face.

"I wish I knew what to say," he murmured absently. "It might be the chance of a lifetime. The man claims he's got a tube that will make it possible to send television around the earth. It's worth a lot of millions if it works."

"Can't you test it?"

Dad shook his head. "It would take twenty-five thousand to test it. We'd need a lot of equipment. And you can't take it to any of the big manufacturers, because you'd lose it fast if they discovered it would work. That's where the gamble comes in. I'd have to back it, sight unseen."

"There are lots of gyp artists going around," his mother suggested.

"Yes, but darn it, Gwynne, once in a while there's the real thing drops in your lap, too. Remember Clarence Fisher? He ran into the same kind of deal—a naive fellow from the country somewhere, had a new idea for automatic heat control in an electric circuit that did away with contacts. Something brand new. Clarence took a chance, and look at him now. Winters in Florida, summers in Acapulco. No worries about anything. Gosh!"

Tommie thought he'd rather live in the mountains, where he could smell the pine-trees.

"Can't you check up on Mr. Franklin?"

"I've checked. Not really much background. Claims he's been roaming a lot. Could be, too. The whole deal is, I guess, we've got a good little business making ordinary television tubes, and it's a question whether we want to be sure of a decent living or take a chance on a fortune."

"Maybe it's better to be safe," said Tommie's mother.

"Well—"

Tommie had never seen dad squirm before, but certainly he was squirming now—mentally, that is. Tommie felt sorry for him, but he went ahead making a solar system in the sand, because he wanted to hear more. He felt sure he could help dad if he could find out more about it.

"The worst of it is," his dad went on, "if

our competitor should get hold of a tube like this, it might even put us out of business."

His mother sighed. "It's a problem," she remarked sadly.

"It sure as h--it sure is. It all adds up to this: I have nothing against him, although he's not very solid from a standpoint of background. It could be the real thing. Clarence Fisher's was. Maybe I'm just too conservative—too scared."

"You've checked his blueprints?"

"Yes, and I can't find anything wrong. It looks sound. That's the worst of it."

"When do you have to let him know?"

"He's coming here at eight o'clock tonight."

Tommie's mother got up from the grass. "Do what you think best, Howard." She went inside.

LITTLE TOMMIE was glad the man was coming at eight o'clock, so he could be in on it. He didn't have to go to bed until eight-thirty, and maybe if they got interested he could get by until nine o'clock, by keeping quiet.

He got up and went to his dad's chair, but dad didn't notice him. Dad got up and followed his mother into the house. Tommie went back to gather up his toys. It would soon be time for the sun to go down, anyway.

He got the sun-energy set in his arms, and then he had an idea. He went through the back and over to Bennie's. Bennie was four.

"Will you try my set and let me try yours?" asked Tommie.

Bennie looked down from his half a head of tallness. "I guess so."

They traded. Bennie started up the cycle in Tommie's set. When he was halfway through, Tommie sat down and started Bennie's set. But he watched as the four hydrogen nuclei of his own set went together and formed a glowing blue helium nucleus.

Then he watched Bennie's set between his chubby legs. Presently the hydrogen nuclei, swirling in their orbits, ran together—and there was a flash of green light and an explosion. The four nuclei disappeared.

Tommie felt bad. Bennie was indignant. "What's the big idea—making them explode?" he demanded.

Tommie didn't understand.

"You must have some kind of electricity in you," said Bennie, "that makes 'em explode."

Tommie thought about that. Yes, there must be something about him. Maybe the

same strange force that enabled him to suggest words to his mother and that had made it possible this afternoon for him to split—maybe that did something to the delicately balanced nuclei.

"Look," said Tommie. "I owe you four hydrogens, but I can't pay now, because then I won't have any left. I'll pay you tomorrow. Is that okay?"

Bennie was dubious at first, but he thought about it and decided that would be all right. Tommie went back home with plenty to think about—so much, in fact, that through dinner he was quite silent as his father and mother worried about Mr. Franklin and his new television tube.

Mr. Franklin came promptly at eight, and they all went into the front room as soon as mother threw the dishes down the chute. Then they had coffee, and Tommie began to worry. Nobody said anything about business for a long time.

Tommie went and got his sun-energy set and settled himself under the arm of his dad's chair. Then he looked up expectantly for a pat on the head, but instead of that his father was staring at him. Tommie remembered how the hydrogen nuclei had misbehaved, so he got to his feet again and went for his chlorophyll kit. He set that up and turned on the little artificial sun and then just watched. It was fun to see the sunlight soak into the green liquid in the test tubes, and come out at the bottom as bubbles of carbon dioxide. It was quiet, too.

"So you think," his father was saying, "that we should have fifty thousand to start with."

"We should have about twenty-five cash, and twenty-five in reserve," Mr. Franklin said. He was a very handsome man.

"How long will it take us to get into production?"

"That all depends on you," said Mr. Franklin. "The only thing we have to worry about is getting the germanium. That stuff is scarce, but I think if we take the cash, I know where we can lay hands on a couple of hundred pounds. It will take about ten thousand to swing that end of the deal."

JUST about then Tommie felt his father was beginning to squirm. "What do you think?" he asked Tommie's mother.

She shook her head. "You're the business man, Howard. That is for you to decide."

Mr. Franklin laughed pleasantly, "That is

a very wise observation, madam. To many women try to run their husbands' affairs. I say you are very wise."

But Tommie felt something else. His mother was troubled, too. Tommie slowed the chlorophyll cycle so he could watch the light reflect from the nitrogen molecules at the bottom. He wondered why his mother was troubled. Tommie frowned.

Then Mr. Franklin took some papers from his inside coat pocket. "I have the contract, the way your attorney approved it," he said casually. "We might as well get that part of it settled. You don't need to put up any money till tomorrow." He laughed, and Tommie's ears pricked up. That laugh sounded strange. "I'll take you on faith," Mr. Franklin said, and handed the papers to his father.

Mr. Bassford frowned and began to read. Tommie got up and stood against one knee. There were a lot of typewritten pages, mostly with 'whereases' and 'parties of the second part.' Tommie squeezed close, looking at Mr. Franklin, but his father didn't put his arms around him. "Go away, Tommie. Go play," he said.

Tommie was hurt. He stared at Mr. Franklin and he was puzzled at the strange look in Mr. Franklin's eyes as Mr. Franklin stared at him.

Presently Tommie's father looked up. "I guess that's it," he said.

Mr. Franklin was already handing him a pen. It was one of those new eternity pens with a built-in radiant light. Tommie edged closer. His father took it. He laid the papers on the writing-arm of the chair and poised the pen for an instant, made a flourish in the air, and started to write.

Tommie was bending over to watch the little light. His dad stared at him in that contemplative way and said, "You're jiggling me, Tommie. Why don't you go over and sit on Mr. Franklin's lap while I sign the papers?" Tommie didn't want to sit on Mr. Franklin's lap, but from the look in his dad's eyes he knew it was a command. He turned around.

Mr. Franklin was reaching for him. "Here, little man, come here to me," he said. "I'll hold you while your father signs the paper that will make us all millionaires." He reached out to pat Tommie on the head.

Tommie wasn't very clear as to what a millionaire was, but he knew one thing—he didn't want Mr. Franklin patting him on

the head. He squirmed away, toward his dad. Mr. Franklin reached for him surprisingly fast. In fact, his movement was so quick you could hardly see it. Tommie dodged again, and this time he was in a little panic. He felt that same repugnance he had felt for Mrs. Jones. He didn't want Mr. Franklin to touch him.

But Mr. Franklin got him by the arm. He held hard, and it hurt, while Mr. Franklin was smiling with a sort of stiff mouth. "Now, now, come and sit on my lap, little man."

TOMMIE tried to twist away. Mr. Franklin held hard. Tommie squirmed. He couldn't get loose from Mr. Franklin's grip. He squirmed harder. He broke free. That is, he projected himself to one side and looked at Mr. Franklin holding what was really his shell.

Mr. Franklin was startled, but he didn't hesitate. "Oh, a schizo," he said, and something came into his face that was frightening. He snatched at Tommie's second self with one arm. He caught Tommie by the belt on his red linen pants and pulled the second one toward him.

Tommie split again. Now he stood off to one side and watched, a little fearfully. Mr. Franklin was getting pretty angry. But Tommie's father spoke up. "Why not just let him go?" he said, and the way he said it, it was a command that he expected to be obeyed. Mr. Franklin looked up and slowly turned Tommie loose. Tommie straightened his belt and his three selves went back together.

His father was handing the papers back to Mr. Franklin. "I've changed my mind," he said. "I'll take a chance on being a small business man."

It was rather unpleasant for a few minutes, but Mr. Franklin left, with his papers in his pocket.

Tommie's father was sitting back in the big chair with a half smile on his face. "So a phony makes Tommie split, eh." He chuckled. "Tommie's right. Not that I would blame any man for not particularly caring for children. That's a man's privilege. But I didn't like that ugly gleam in Franklin's eyes when he thought Tommie was going to interfere."

Tommie was pretty much unstrung. He sat down under the arm of his father's chair and pressed the button that started the carbon cycle.

"I'm glad we found out in time, Howard," said his mother. "But what about Tommie?" She sounded worried. "Do you think—"

"It's probably nothing serious, and probably nothing that we can do anything about. If he wants to split when un-nice people come around, that's his business. Anyway, he'll probably outgrow it in a few years. Most of them do."

Tommie watched the four hydrogen nuclei go together, and instinctively he drew back for the explosion. But there wasn't any. The four went together into the blue ball that meant a helium nucleus. Tommie clapped his hands. They had worked right this time. Maybe his body energy had been drained by the double split until it didn't affect them any more.

Tommie's mother looked at him softly. Tommie looked back softly. Then he sidled up against his father's leg. His father reached down and caught him around the chest and squeezed him hard.

It made Tommie very happy. "Dad," he said, "what's a phony?"



COMING IN THE NEXT ISSUE

The Weakness of Rvog

An Amazing Novelet by JAMES BLISH and DAMON KNIGHT

Fruits

OF THE AGATHON



AGATHON: (From Greek, *agathos*, good, and *thanatos*, death.) Employed briefly during the pre-Toring era. When the death of a citizen of interest to the Lodges was predicted by his biostat (q.v.), the Council arranged secretly for the demise to occur under the circumstances considered most beneficial to the world. After the personality factors of all principals concerned had been integrated and the death plan (or agathon) determined, it was carried out by the local preceptor.

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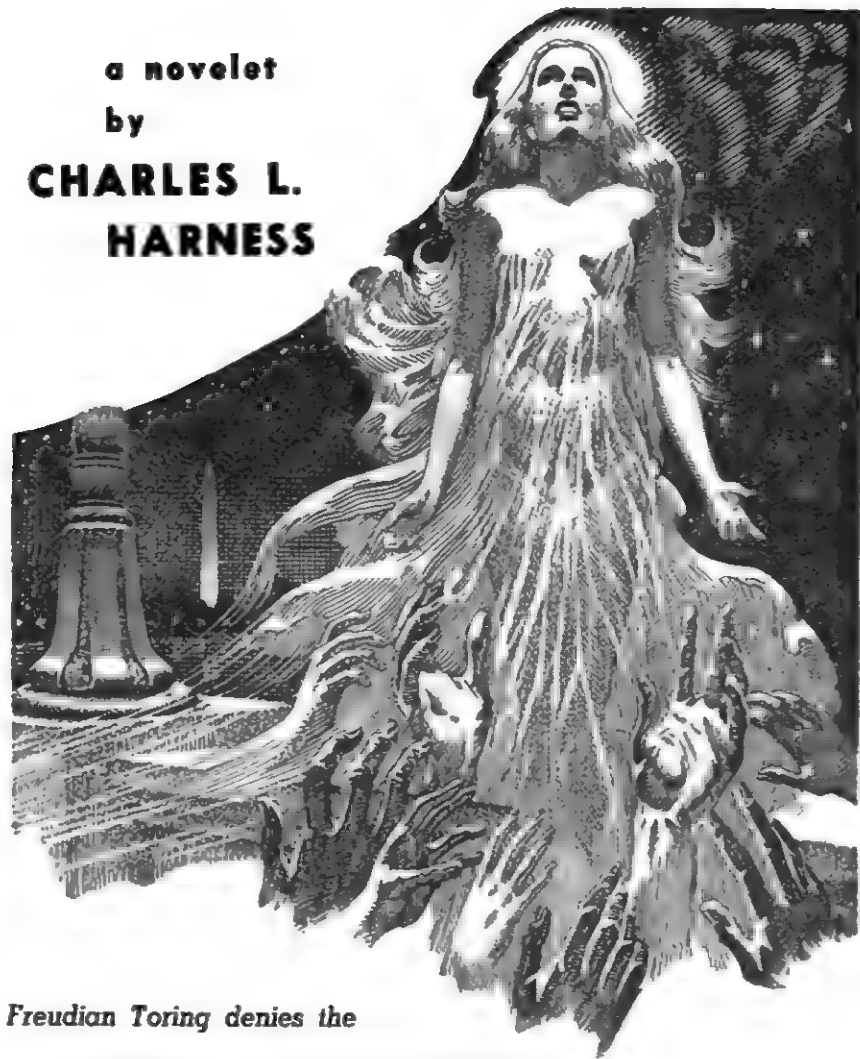
Fruits OF THE AGATHON



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a novelet
by
**CHARLES L.
HARNES**



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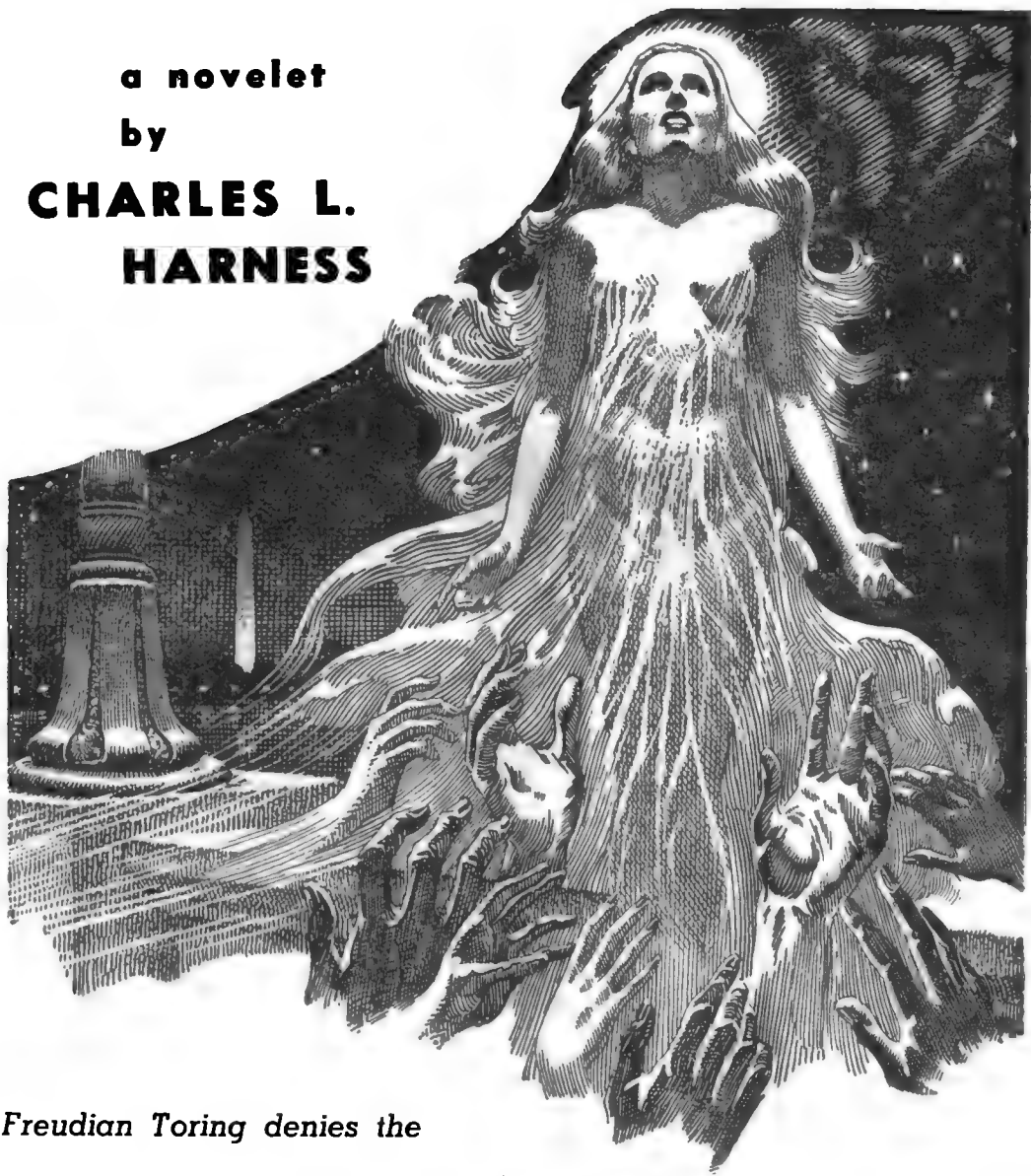
THE little man, Blanchard, said with no trace of defiance or apology: "My daughter Naila is a moron."

Behind the desk Toring, the Freudian, shifted slightly under the long gray cape that covered his entire body, and turned his eyes from Blanchard to the girl huddled in

the wheel chair. She was perhaps eighteen or twenty, dressed neatly in tweeds. Her face was averted, and the Freudian could see only a pale-olive cheek, hidden partly by slender fingers and dark brown hair.

He sighed and shook his head. "We cannot increase native intelligence. But you

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didn't bring your daughter here for that, anyway."

"No, I didn't." Blanchard's voice was double-edged with both pleading and threat. "Something has scared her, and the Lodge has got to assign an analyst and straighten her out."

"So? What do you think frightened her?"

"I haven't the faintest notion. It dates from a couple of weeks ago, when her older sister, Maillon, had an operation. Simple thing, nothing to worry anyone. Naida visited Maillon's hospital room the evening after the operation."

"They were alone?"

"So far as I know. I was to come by later and pick up Naida. Well, a nurse called me from the hospital. Naida had been found lying in the corridor—like this. She hasn't spoken since."

"Had she been in her sister's room?"

"We think so. Maillon couldn't say. She had been given a sedative in the early afternoon and she was unconscious during the whole time. But we found Naida's hat on a table in the room."

"Who else had been in there?"

"Again, we can't be sure, but Maillon's husband, Pickerel Follansbee, might have been. He inquired minutely at the desk that afternoon as to Maillon's condition, but he denies going up."

Toring's eyes widened imperceptibly. Blanchard had taken no pains to conceal the hate in his voice.

"Now," continued the patron, "are you going to give me an analyst?"

The Freudian's face was troubled. He did not answer immediately.

"Toring," Blanchard said, "you are the preceptor of this Lodge. It is within your power to do this small thing for me. I want my child back!"

Toring regarded him gravely. "I cannot assign an analyst for at least four months."

BLANCHARD, accustomed to the autocratic rule of two million employees in both hemispheres, sat back thoughtfully in the green leather chair. He had been prepared for a preliminary rebuff, an attempt to put his daughter on a waiting list, and Toring's statement did not surprise him. The ceiling flours glinted from his bald head as he studied the man who withheld the key to his happiness. The battle was hardly joined. In a few minutes he would know his

opponent's weak points, and he would strike. At least, that always worked in the business world.

But these Freudians . . . He was never sure of himself around them. They all looked alike. There was some rumor that they underwent painful plastic surgery and skeletal modifications on entering the Lodges, so that they all reflected the same gray sympathetic anonymity. But, they must get fed up, sometimes!

He pulled out a cigar, bit off the end, and lit up with more confidence than he felt.

"Toring, my industrial holdings in the United States are assessed at a little over eight billion dollars; abroad, at nearly two hundred million. If you'll start on Naida immediately, I'll convey my total American holdings to you and leave the country when you've finished with her."

The Freudian was silent a long time. "I believe you would really do it," he mused, appraising the magnate with something bordering on pity. "Your offer disturbs me, but possibly not in the way you think. I have no use for eight billion dollars. As a matter of fact I don't think any money has passed through my hands for some years. Despite your personal feelings, your daughter must take her turn."

Rather idly, Blanchard blew a smoke ring toward the ceiling fluur. In moments of greatest stress he was always cool—and thinking.

"You are a celibate, of course, Toring. But you must have a family you'd like to benefit. Parents? The senior Torings? Brothers and sisters?"

"Theoretically, Mr. Blanchard, a Freudian has no family. I had a father and two brothers living when I entered the Lodges, but now I have no ties at all. My father knows only that his youngest son is a Freudian, somewhere. He couldn't possibly recognize me if he saw me. Anyway they are all independently wealthy. And incidentally 'Toring' is not a family name, but a pseudonym."

"Perhaps my persistence is obnoxious to you," said Blanchard, somewhat uncertainly. "However, here's another thought. Don't you have a few hours during the day that you ordinarily devote to rest and relaxation? Would it hurt you very much to give up a little of that precious time to curing my daughter?"

The other smiled faintly. "How old do you think I am?"

"What's that got to do with it? Well—fifty?"

"I'm thirty-five. I haven't slept in ten years. Not since I was assigned here from the Freudian University in Budapest. For twenty-three hours a day I sit in on psycho-analytic case work. The other hour I use for 'Follansbee sleep.' I have no leisure whatever."

For the first time Blanchard admitted the possibility of defeat. He coughed to cover the lines of worry gathering in his face, and his daughter jumped nervously and looked about the room with frightened eyes. It suddenly occurred to Toring that she was beautiful.

"It's all right, dear," said her father reassuringly, pulling the robe up over her lap. "I'm here."

He turned back to Toring, hesitant to demand the thing that was in his mind, yet determined to leave nothing untried.

"As I understand Follansbee sleep, isn't that simply a process of blood renewal, which takes about an hour?"

"That's right. Dr. John Follansbee—Pickerel's father, incidentally—established years ago that sleep was merely a symptom of boredom induced and accentuated by an excess of waste products, chiefly lactic acid, in the blood stream. If we remove our lactic-acid-laden blood and replace it with glycogen-charged blood, we kill fatigue, and there remains only the psychological inducements to sleep—boredom, habit, and the escape complex that plagues us all. A determined mind can overcome these phantom obstacles."

"I see. You have, then, once a day a free hour—when you are changing blood," insisted Blanchard.

"A free hour?"

"Free in the sense that you aren't occupied with patients."

SLOWLY the Freudian shook his head, and folded up the gray cape that covered him. Transparent plastic tubes led from needles in the elbow-pits of both bare arms to glass cabinets on either side of his chair. The large bottle in the righthand cabinet was nearly empty, that in the other cabinet nearly full. The cape fell again.

Blanchard stared at him.

Toring smiled wryly. "This 'free' hour I devote to rush cases, such as your daughter's, and determine whether the patient should

be given preferential treatment."

"Twenty-four hours a day, for ten years," murmured Blanchard.

A buzzer sounded on the desk. "Yes?" asked Toring.

"Budapest calling," intoned a woman's voice.

"All right. And, Registrar, can you give J. T. Blanchard's daughter Naida an appointment in four months? Indeed? Then you've got to postpone a start for somebody. No, keep that boy on the list—he's a chronic suicide. Mrs. K.? No, she's a widow with two girls in school. Senator D.? Simple schizo? Good! Shove him down a few months. He'll be reelected anyway, and that's all his family is really worried about."

He turned to the patron. "I'm going to run you out now, Mr. Blanchard. Stop by the desk down the hall and the registrar will give you an appointment. Four months' delay won't make an awful lot of difference in the long run, since the analysis may be a matter of years."

As he watched the industrialist push the wheel chair out, Toring disconnected the needles from his arms, knotted his fists experimentally a few times, stood up, and stretched vigorously. He still felt tired.

He turned back to the video screen, took a deep breath, and pushed the "Come in" button.

From beneath the bushy V of satanic eyebrows, Rachs' jet eyes seemed to shower sparks at him. As usual, that immobile face was incandescent, and Toring fancied he could almost hear the creaking of a carbon-arc in the brain of his superior. The Hungarian's incredible energies frightened, rather than soothed patrons, and for years he had worked solely in the advancement of extra-sensory mechanics.

"Toring," he clipped, "I want you to kill a man."

The younger Freudian swallowed rapidly, and he was conscious of a dark silence in the room.

"I take it that the Council has finally approved your agathon program?" he asked the eyes.

"Two hours ago."

"Very well. Who is the man?"

"Dr. John Follansbee."

The analyst's knees went rotten. He leaned heavily over the desk.

"You realize, of course, that you're asking me to kill my father?"

"The subject was your father in pre-Freudian life. Now, you have no family."

"Where are you calling from?" asked Toring through a dry throat.

"The 'stat room."

Toring repressed a shudder. He had been in the biostat rooms. He had even seen his own 'stat, scratching away slowly at the unknown days remaining to him. That scraping stylus had blended with a hundred thousand others into a sinister fate-whisper. It must be terrible to know when one was going to die.

Rachs' eyes disappeared abruptly and the scene shifted to a large transparent plastic cabinet containing a complex potpourri of small black spheres connected together intricately with insulated wiring. On the front of the cabinet was a kymograph. The stylus was dead, unmoving.

Toring read the legend:

No. 19,644. Follansbee, John, D.Sc., Director, Follansbee Research Institute, Washington, D. C., U.S.A. Jan. 10, 1902—2:10 a.m. E.S.T. Feb. 16, 1978.

The latter date had very recently been added in ink. February 16 was—tomorrow.

"The Lodges have delayed initiating agathon practice for years," said Toring evenly. "Why start now, and why, my—why Dr. Follansbee?"

The black diamond eyes appeared again, and seared into him.

"Good questions. We start now because in the past ten years, out of the two thousand two hundred and one deaths predicted by the biostats, there were two thousand two hundred and one deaths. And in over ninety-odd thousand operating 'stats, no deaths went unpredicted. We had to wait until the absolute infallibility of the machine was demonstrated."

"I'll warn my father. He can leave the country."

"You're being surprisingly emotional, Toring. Skip country? It would be like leaving Bagdad for an appointment in Samarra. We tried that. One thousand and ninety-eight subjects were forewarned. Some left town. Some shut themselves up. Some did nothing. They all died at the minute predicted. Accident, disease, old age, a few murders, and one suicide."

"Even so, I—I just can't accept the biostat as a reality. The Freudian concept of mental health is based on free will, not on an inexorable steel-clad fate mapped out by a

soulless machine!"

"My boy, there's really no free-will-versus-predestination conflict. You're forgetting all the groundwork of ultra-Freudianism begun at Duke University before you were born. Listen! Early experimenters at Duke, *before* shuffling a deck of twenty-five cards, would attempt to predict the post-shuffling sequence. They called it PDT—precognitive down-through.' As you recall, some of the predictions were extraordinarily successful."

TORING nodded.

"Now follow carefully. The normal human mind, traveling in a unidimensional time flow, knowing only 'before', 'now', and 'after', would have to wait until 'after' the shuffling before it could know the sequence. The metanormal mind, on the other hand, is not bound in unidimensional time. It travels freely backward and forward at an arbitrary rate. For that mind, time is bi-dimensional at the very least. With the biostats, we've finally attained the same result—a machine attuned to a human mind and capable of projecting the existence or nonexistence of that mind about three days into the future."

"Isn't that predestination?" insisted Toring.

"Not at all. It's simply the prepublication of a brief chapter already written by free will."

"I'm not convinced. Possibly the thing you want me to do precludes an objective approach. But you still haven't answered my second question. Why have you chosen Dr. Follansbee, my father, for the first agathon?"

The eyes sparkled. "A few months ago, just before the cyclotron blinded him, Dr. Follansbee was on the verge of communicating across time with other minds, including his own. You've got to stimulate him into a forceful demonstration, catch him in the act, and find out how it's done. The specialized tele-encephalographic analyzers you'll need to focus on him have been shipped on the Trans-At jet, and they'll be in Washington port any minute. You inherited the Follansbee mind, and despite the limitations of your classical education, you would be best able to grasp and apply the telekinetic principles involved. But that's just the beginning. Extra-temporal communication—the ability to impinge a thought pattern on a mind over

time—is merely a specialized form of psychokinesis.”

“I’m afraid I don’t understand.”

The eyes snapped irritably. “Of course you do. It means you’ll have the power to suppress—or stimulate, telekinetically—any given neural pattern in the mind of your patients. Telekinesis applied to another mind is psychokinesis. You’ll be able to cure a psychotic in an hour instead of the months and months of daily sittings now required. Boy, think! This will revolutionize Freudian technique. It will mean we can give a normal, healthy mental life to the millions we have to turn away every year.”

The face in the screen suddenly relaxed and smiled—a benevolent Mephistopheles.

“How about it?”

Toring, his hands behind his gray robes, was pacing the room slowly. He stopped and looked with troubled eyes at the older man.

“You are absolutely positive the biostat never makes a mistake? That my father would die tomorrow, no matter what I do?”

“The facts speak for themselves. It’s a sure thing.”

Toring’s eyes were half shut in a profound reverie. “If I undertake this thing, it will be because I hope to develop something that will destroy it for all time . . . Tell me, Rachs, have you tried the biostats on twins?”

“Twins?” Rachs looked surprised. “Well, yes. At birth their minds give the same encephalographic pattern. One biostat stays tuned to both minds, even though they diverge greatly as they mature.”

“So that if one twin died, the biostat wouldn’t stop?”

“The stylus would jiggle a bit, but it would keep going.”

“And you know that I have no twin?”

“Of course you don’t. Blaine and Pickerel are both older than you. What are you leading up to?”

“This: If I died, and my ’stat continued to run, you’d admit your biostats were fallible, and stop the agathons?”

Rachs studied the analyst shrewdly. “I would. But whatever you have in mind, it won’t work. The ’stat has proved its precision. It’s here to stay.”

“You’ve told me what I want to know,” Toring continued gravely. “and I accept the responsibility for the Follansbee agathon. At the same time I warn you that murder in the name of humanity is a paradox that I cannot appreciate, and I expect to dis-

credit your system completely.”

Rachs grinned balefully. “That’s the spirit, you young devil’s advocate! If you die and your ’stat goes on running, I’ll have the council withdraw the program!”

Their eyes looked in spirited challenge.

Rachs looked down, first. “Now to business. You won’t really strike the death blow. Your brother Pickerel is itching to do that, but he hasn’t enough sense to do it cleanly. You’ll have to help him. He tried to kill your father in the cyclotron room, once before, but only blinded him. Or didn’t you know? This time it’s got to go smoothly. Here’s the plan.”

Incapable of further surprise, Toring listened, nodding from time to time. . . .

DR. JOHN FOLLANSBEE lay utterly relaxed for a moment after the concerto died away. His couch was a mass of inflated cushions floating in a small pool of water, warm and scented, in the Sleepless Wing of the Lodge.

The last of his lactic-acid-laden blood was draining from his veins, and the bottle above him, containing the glycogen-rich blood, was almost empty. His pulse was accelerating. He flexed his biceps and stretched, but gingerly, to avoid pulling the needles from his arteries.

The enchantment was fading. The frightful thing that he had been trying to escape for weeks began again to gnaw hungrily at his brain. His peaceful smile vanished quickly. He tugged at the guide rope lying across his cushion-raft and pulled himself to the pool edge. Here he yanked at the bell and soon heard the scrape of sandals on the marble flagging.

He cocked a blind eye in that direction. “Toring?”

“Right, Dr. Follansbee.”

The preceptor helped the patron over the pool edge. Dr. Follansbee immediately tried to guide the conversation into painless territory.

“You thought you had me on that *leitmotiv*,” he growled. “I’ve been wondering how long it would take your composers to break down and try a C-E-G triad in the lower bass. Repeated dissonance can result in conditioned consonance, you know. Who wrote it—Maillon?”

Toring’s gray features creased in a faint smile. “You never miss, do you? Yes, your daughter-in-law wrote it last night.”

Dr. Follansbee pulled on his trousers and blouse. "I thought so. What did she name it?"

"'The Death of John Follansbee,'" replied the preceptor evenly.

Follansbee hesitated a moment. "I can't hide a blessed thing from her," he muttered. "It's rumored, you know, that you mind readers have a gadget capable of predicting death." It was a question rather than a statement.

"I needn't comment on that, Dr. Follansbee," replied the preceptor evasively. "Your own remarkable premonitions are ample raw material for a Freudian musician. And Maillon is particularly acute at sensing your moods. As a Freudian associate, it is her duty to help you understand yourself."

"Don't preach to me of Freudian duties," rumbled Follansbee. "I laid the cornerstone to this Lodge before either of you children were born. My youngest son is a Freudian analyst—somewhere."

Toring paled, then laughed uneasily. "All right, I won't preach. And I suppose you're not interested in what Rachs had to say about your prescience of disaster?"

"He has a good idea once in a while Shoot!"

"As you know, it takes a Freudian to recognize a non-Freudian psychosis. Frequently a prescience of death is found on psychoanalysis to be simply the subconscious wish for the death of an enemy, inverted by a guilt complex into a sense of impending disaster for the wisher. At first, we thought this possible in your case."

"I know lots of people I'd like to see dead," said Dr. Follansbee cheerfully, as they reached the dining couch and picked up the chilled beers.

Toring continued quietly. "Rachs believes that you are now in subconscious communication with your own mind at the moment of death—a unique interweaving of chronopathy and telekinesis. He thinks that you might, under proper stimulation, touch other minds in the future in the same way that you have touched your own."

Follansbee was not listening. "Even if it's true I'm going to die, I don't like to think about it. Disturbs my work."

"Are you still working on Maillon's carcinoma?"

"Yes. Blaine, my eldest son, and I are spending twenty-three hours a day on it." He shook his head sadly. "So far, we've

got nowhere. Perhaps we're even losing ground. About two weeks ago, just after the operation, the growth went unexpectedly metastatic, and we know of at least eight new colonies. Further surgery is out of the question. We'll have to find a specific for carcinoma, like barium-Q for radiation burns, or Maillon will die. And soon."

"Is your other son helping you?"

"Piggy? Oh, Piggy—or Pickerel, as his dead mother named him—keeps busy." Follansbee cleared his throat apologetically. "Of course his talents lie in a different direction. He handles some of the administrative details of the floor polish section, but he could never work up much interest in the technical phases of the work. Fine boy, even so," he added staunchly. "Very anxious about his wife, though I'm afraid they haven't got on very well since Maillon became a Freudian associate and started composing for the non-sleepers. In some ways, there's a big gap in their outlook on things."

Toring took a deep breath. "Maillon believes that your thoughts of personal disaster are inextricably intertwined with her carcinoma."

Follansbee halted his glass in mid-air.

"Shall I go on?" asked the preceptor.

FOLLANSBEE'S throat was suddenly dry. He had told these people nothing. Yet they knew—how much?

"Go on!" he rasped.

"Maillon says you think you are going to be murdered."

There was a crash of glass. Neither of the men moved. Rivulets of bubbling beer trickled away from the patron's fallen goblet.

The excruciating probe began again. "She says that you know who will kill you."

The scientist was panting heavily.

"Which son, Dr. Follansbee?"

Toring's cheeks were gray marble, but his nostrils were painfully dilated over trembling lips. At this moment he felt he had lost forever his right to the society of decent human beings, and he swore silently that if he now failed to extract the secret of psychokinesis from his father he would kill himself painfully. If he were successful, he would die too, of course, but there would be no element of self-punishment involved, and that death need not be painful.

"You must do nothing," stammered the patron. "The Freudians are not policemen."

Toring helped Dr. Follansbee over the

broken glass and walked to the entrance with him.

"One last question, doctor," he said as they stood in the doorway. "Are you afraid to die?" He awaited the answer with a strained expectancy unusual in a Freudian.

Follansbee had recovered his poise. "How can I be afraid of something I know nothing about? That would simply be a superstitious fear of the unknown, not of death." He tapped his cane. "Good night, Toring. I have to be at the lab at two-ten."

* * * * *

"Your chess composition is like a chord of music," said Blaine Follansbee, eyeing Maillon curiously from his blood-change armchair.

The woman he addressed lay in a high white hospital bed, her black hair tumbling about her pillow in calculated confusion, one olive-hued arm stretched languidly toward the chess board control box, the other doubled under her pillow. Her cheek bones and nose were sharply defined even under the soft radiance of her bed fluor.

Blaine grinned at her suddenly. "A pure multiple echo, really. Same type of harmony you find in a tone poem. I, the experienced solver of chess problems, look through the echoes and see the musician." He removed the needles from his arms and rang the bell for an attendant. "And now I've got to go."

The woman, who had been devouring his praise hungrily, pouted. "You're a few minutes late already. If you'll stay a little while longer I'll show you how to force a mate with two knights against the lone king."

"You're a liar. No, I'll have to run. We're taking u.v. slides of some growth from your larynx, and I want to be there to tell Father what the negatives show. From now on, every minute counts."

"Have you really found something?"

"We don't know. We've been working with a possible specific—a derivative of rose oil that inhibits cytolysis in vitro, but has no effect in vivo. What we really need is some agent that could create the rose oil derivative right in the blood stream, but of course that's preposterous."

"You don't sound too hopeful. If I'm going to die anyway, why leave early? Why sacrifice your one hour of rest just to squint futilely through a microscope?" She twisted nervously at the coverlet.

The man's voice was suddenly tired. "How

do I know whether you're going to die? Ask your Freudian friends. It's rumored they can predict death probabilities. All I can do is keep working."

The attendant entered and rolled the chair out.

Blaine picked up his hat. Maillon made a *moue*.

"Best o' luck on the magic bullet. Dr. Ehrlich. I'm writing the Nobel Committee tonight."

The man and woman looked at each other briefly, without expression.

"Tomorrow night, same time," he muttered, and left.

* * * * *

Dr. Follansbee's braille watch chimed the hour, two o'clock in the morning, as he stepped from the piazza of the Freudian Lodge and began his short walk across the campus of the Follansbee Institute, toward the Pathology Building.

Which son was going to kill him?

Was it Blaine, the tall, yellow-haired one, the diligent, industrious one, the one who would logically succeed his father as director of the Institute? Or was it Pickerel, "Piggy," the affable, entertaining one, the dark, chubby one, the one who would lose most from his father's death, and whom so many people strangely disliked?

He stopped in the middle of the path, surrounded by darkness and stars, and pulled a small needle gun from his pocket.

There was a good way to stop either of his sons from becoming a murderer. He would finish now what the cyclotron had failed to do when it had blinded him six months back. He lifted the weapon to his temple.

CYCLOTRON? Charged particles? Of course! New eyesight. The problem that had occupied his mind for months, waking and blood-changing. It was absurdly simple, when one knew the answer. Why had it taken him so long to think of this? He mustn't let it be lost now. He would make notes tomorrow.

But tomorrow he might be dead, and countless blind people would be cheated. As he stood, sunk in thought, he remembered Toring's suggestion that he might be able to pierce the future and touch other minds.

For a moment the man stood immobile, his body stiffening, while his mind spiraled through cold time and space, alert, searching.

He found her—Maillon. With sly, eager malice he beat out the opening chords of the death concerto she had written for him. He sensed her incredulity, and grinned. Then his lips pressed together tightly and he hammered away at the details for the artificial eye.

The contact wandered, then faded, but he knew she had the essential elements. She would understand. She would understand everything except why he had called to her instead of Blaine or Piggy.

His somber intent likewise faded, and a few minutes later he unlocked the door to the Pathology Building and let himself in. He had preceded Blaine, evidently.

Or had he? Was there a noise on the stair?

With slow but sure step he walked over to the stair and began the ascent toward the laboratory, which opened on the mezzanine balcony. Halfway up he felt a breath of icy air. He stood very still. The now familiar sense of immediate destruction, and a belief that he had passed someone on the stair, struck him simultaneously. And he knew now who would kill him.

"Piggy?" he whispered.

There was an audible click as the entrance door opened and closed. Silence was complete in the building. The intruder had left.

Dr. Follansbee suddenly felt weak. For a moment he grasped the stair railing, breathing heavily. But he must delay his sinister appointment no longer. He walked rapidly up the remaining stairs, down the hall, and opened the lab door. He flicked the fluors on, and then, as he was reaching for the u.v. switch for the microscope condenser, he heard the lower entrance door open again.

That must be Blaine. Yes, there were his steps on the stairs. He must warn Blaine to stay away tonight. Tonight, he must work alone.

As he turned toward the door, he pressed the u.v. switch. A beam of barely visible blue light shot across the microscope bench, past the microscope condensing mirror, and into a quartz jar of americium fulminate. But Dr. Follansbee never knew this, because immediately afterward he was lying on the lobby floor, dead, with shards of glass dropping musically around him.

The explosion echoes died away.

With a heavy hand Toring pushed the tele-encephalograph tapes to one side and looked at the fat man behind the gun.

"It's all over. Why don't you shoot?"

"One of your nurses is in the hall. I'd prefer she didn't see me leave." Pickerel Follansbee's red eyes studied the preceptor curiously. "Did you think I could let you live after you gave me the fulminate?"

"I hadn't considered the question."

"What was your angle? Why were you so eager to help me?"

The Freudian sighed wearily. "Just an idea that didn't quite click. It doesn't matter, now. How about you? Do you really believe Blanchard will make the trustees appoint you the new director of Follansbee Institute?"

"Why do you think I married his daughter?"

"Of course." Toring fingered the tele-encephalograph tapes thoughtfully. "Tell me, Follansbee, have you seen Naida lately? Your wife's sister?"

The other laughed harshly. "That stupid little mutt! I scared the devil out of her two weeks ago. Haven't seen her since. She scares easy," he added with a reminiscent grin.

Together they listened to the sound of the nurse's heels dying away down the hall.

"Follansbee," murmured the analyst, "I've changed my mind about letting you kill me. Though I've failed in a great thing I cannot indulge, just yet, in the luxury of the grave. I've got to make another try. I simply *must*." He seemed to be talking to himself.

"Sorry, Shakespeare. Say your pr—"

He broke off, eyes bulging. Toring's inkwell was boiling furiously.

Pickerel laughed nervously. "Your tricks don't scare me!"

"I'm not trying to scare you. I'm just trying to show you something interesting. Do you see these tapes? They recorded your father's thoughts during the last few hours of his life. And they carry a remarkable secret. Not quite so wonderful as I had hoped, but adequate to persuade you to avoid me for a few days, while I study that secret further."

PICKEREL leaned forward suspiciously. "Yeah?"

"Your father was a chronopath. He had the ability to impress a thought pattern on the mind of another, across time and space. This magnificent gift is really just a specialized variety of telekinesis, the cruder forms of which can be acquired by certain types of

minds—my own, at any rate.”

“Hurry it up, bright boy.”

“As for the ink-well, that was simply a matter of separating, telekinetically, the faster water molecules from the slower and concentrating them at the surface of the ink until their vapor pressure per unit area reached about seven hundred and sixty millimeters of mercury. It might astonish you to learn that billions of molecules are controlled so easily. As a matter of fact, a generation ago, Dr. Rhine of Duke University, using dice, proved that certainty of control increased with the number of objects employed.”

Pickerel pointed his needler carefully at Toring's left breast and squeezed the trigger—hard.

“An analogous application, though in reverse,” continued the analyst mildly, “is in condensing the white-hot steam jet of a needler. The heat from the americium capsule is preferentially dissipated within the chamber and handle of the—”

In a spasm of pain the fat man flung the gun away and thrust his fingers in his mouth.

“I'll get you yet!” he snarled.

The desk video buzzed. The Freudian looked up placidly. “Will you excuse me?”

A strangled cry was still-born in the fat man's throat. He scooped up his needler with his handkerchief and dashed from the room.

Toring sat folding and unfolding his pale hands.

The video jangled again. He pressed the “In” button.

Rachs' demoniacal eyebrows lifted questioningly over flashing black eyes.

“The explosion went off as scheduled,” said Toring without expression.

Rachs waved that aside impatiently. “Did you get anything from the tapes?”

“Not much. Just simple telekinesis. I tried it on Pickerel a few minutes ago.”

“You worked on his cortex?”

“Not that. I could have penetrated his mind easily enough, but it would have killed him. I'm ready for psychokinesis.”

Rachs couldn't conceal his disappointment. “Perhaps your mind is still too stiff—too clumsy. I thought that putting you through the emotional wringer of killing your father would give you the necessary mental elasticity. It may yet. Keep trying.”

“I shall,” replied Toring evenly.

A thrill of mingled delight and despair surged through Maillon as she examined the dark glasses and the patches of surgical tape that hid the man's face.

Blaine smiled grimly. “If you're thinking that blind men lead a life of leisure and can visit pretty ladies by the hour, you're wrong. Right after Father's funeral we started repairing the lab, and I've set the staff back to work on that rose oil derivative.”

“I'm glad, Blaine. You aren't happy unless you're working, and I want you to be happy. What did the coroner say?”

“He thinks some americium fulminate got in the way of the u.v. beam. Accidental death. Poor Father! He liked being alive. He got a great kick out of thinking that everything he did was making life easier for somebody, somewhere. Which leads to the next question. What's this insane story about Father's communicating with you telepathically?” He snorted. “Spirits?”

“Say what you like. It was he, and you know it. Only your father could have caricatured my concerto with such malicious nonchalance, and you know he'd been trying for months to restore his sight. But what did he mean by ‘snooperscope’?”

“I've been working on the assumption that he had in mind the old infra-red snooperscope developed during the last war. You shine a source of infra-red light—just a plain tungsten lamp with a thin ebony filter—on the object, and pick up the reflected infra-red rays in a tube something like the old orthicon used in television of the late Forties. This incoming infra-red ‘light’ is focused through a glass lens and forms an image on a convex screen of caesium-silver oxide. The screen shoots off electrons where the infra-red rays strike it, and these electrons are focused by an electrostatic electron lens on a fluorescent screen, which gives the final visible image.”

“But you're blind. How're you going to see that screen?”

“That's the pretty part of it. My visual pigments—rhodopsin and iodopsin—were burnt out by the flash of the explosion. The oculist-surgeon says they're in the light-bleached phase now and will never again activate the rods and cones that in turn energize the retinal nerve endings. But the nerve endings themselves are intact.”

MAILLON gasped in sudden comprehension.

"Do you mean you're going to substitute your retina for the viewing screen of the snooperscope?"

"In a way, yes. That isn't difficult. But adapting the other elements of the snooperscope poses some problems. You have to remember that an electron will pass through only a few inches of air, at most. A fraction of an inch of the saline fluid of the eye would stop it cold. So I'll have to drain the eye fluids and make vacuum chambers of my eyes. For the casings of my new eyeballs, I'll precipitate a thin but strong layer of silica gel, impregnated with platinum dust to conduct electrons to the retinal nerve endings just beyond. When the shell hardens, we drain the fluids, insert the electrostatic lens, and devacuate the shell."

"You'll do *what!*"

"The glassy lens will have to come out, too, of course. Its focal length is far too long to focus light in the short space I'll have available. But a low-powered microscope objective ought to do nicely. I can rack it forward for high magnification, and in conjunction with the electron microscope, it ought to be pretty potent. I even thought about plugging my retina up directly to the electron mike, but I couldn't figure any way to beat that two hundred kv. potential that would be pouring in. I'm going to have trouble enough with the five kv. I'll use with the snooperscope eye."

Maillon sat in her bed, hunched in thought. "I suppose an infra-red world is better than none."

"Ho! Don't underestimate me! I'm really reverting to something like the old orthicon. I won't limit myself to the hundred thousand Angstrom range of infra-red. I'll modify the caesium screen between the glass objective and the electron lenses, and I'll have a spectrum extending from the deep infra-red into the visible."

"When is your operation?"

"At seven P.M."

His lapel video buzzed; he held it to his ear for a moment. "All right," he acknowledged.

"It's Father's secretary, or rather Piggy's now, I guess. The new director wants me to report at once." He sensed Maillon's apprehensive frown. "Don't worry. It can't take long. It must be after six in the evening. Piggy won't stay late enough to miss supper. I'll have the new eyes ready to blink by nine o'clock. Call your father and see if he can

break away from his mergers and swindles long enough to help us. He's a first-class chemist, and we're going to need him. I'll meet you both over at the old pathology lab. And don't worry about me. I've been finding my way around here in the dark of night for years . . ."

* * * * *

"Ah, come in, Blaine," called out his brother heartily. "I'm really happy to see you."

Blaine hesitated a fraction of a second. Piggy's manner reminded him of a huge hog about to pounce on a juicy red apple. He could not tell whether Piggy was extending his hand or not, but he stepped forward to take the chair which in days past had stood by their father's old desk. The next minute he was picking himself up from the floor. As he untangled his legs he reached back and fingered a length of sash-cord tied between Piggy's desk and a nearby chair.

"What the devil!" he spluttered.

His brother beamed, without offering to assist.

"Just checking on your eyesight, Blaine," he said pontifically. "I wanted to see for myself. As the director of this great organization I have to make sure that we are not paying out the money budgeted to us by our clients to persons physically unqualified to advance the work of the Institute."

The blond man got to his feet silently.

"So just sit down, Blaine," continued Piggy generously, "and we'll go over this quietly, like gentlemen. It's true, then—you're blind?"

"A shrewd observation," said Blaine with deceptive gentleness.

"Well, then, don't you see? You are no longer of any use to the Institute. I'll have to let you go."

Blaine smiled. "You've waited a long time for this, haven't you? Very well. Do I have a few days to put my work in order?"

"You'll have the usual thirty days, of course," offered Piggy. "Provided you're willing to observe our new policy."

"What's that?"

"I've rearranged the backlog of work somewhat. We're going to give our biggest clients priority from now on. The little fellows can go elsewhere if they don't like it."

Blaine's smile changed subtly.

"Oh, I know what you're thinking," continued Piggy. "It wasn't Father's way. Well, his ideas were naive, childish. From now

on, we'll help big industry exclusively. The little firms just can't pay the percentages the big ones can. I know where the money is, and I'm going to get it."

"None of the preferred clients are going to give the new director a bonus, are they?" asked Blaine innocently.

PIGGY was not embarrassed.

"I'm out for everything I can get. Father could have been one of the wealthiest men in the country if he had played this game sensibly. Instead, he turned his business over to a bunch of visionary trustees."

"He believed," clipped Blaine, "that was the only way he could preserve his Institute as a benefit to all mankind, not just to a chosen few massive corporations. Haven't you any respect for his last wishes?"

"None whatever. He was a prize fool . . . sit back down, or I'll blast you where you stand . . . That's better. Yes, dear brother, things are going to step lively around here from now on. The first thing you're going to do is drop your silly cancer research. There's no money in that. If you want to keep on drawing your salary during your last month with the Institute, you can start your staff on a problem International Insecticide sent us. You'll find it in your lab, right now. If I were you, I'd go quietly. And remember, there's a nice bonus in it—for me . . ."

Blanchard flung the lab door open, blinking. The foyer and mezzanine corridor of the pathology building were dark, and he could see nothing.

"Hello there, J. T.!"

"Blaine, my boy! You can see!"

"Better than you! I can see in the dark!"

"Let him in, Father," Maillon said. "I want him to look at me."

Blaine laughed. "The female use for male eyes. All right, I'm looking at you, and you're an upside-down sepia portrait!"

"What!"

"Everything I see is a sort of neutral brown. No color, but I expected that because, after all, a bare nerve ending can't sense color. And you're upside down—no mistake."

"Blaine, dear, are you *sure* that local has completely worn off?"

Maillon's father laughed. "He's quite right. The laws of optics give you and me inverted retinal images, which we pretend to turn right side up again by innumerable con-

ditioned reflexes formed during infancy. Blaine has that same mass of reflexes, and now they've betrayed him by turning upside down what doesn't need to be turned upside down. You can cure that, Blaine, by wearing inverting spectacles, but it's clumsy. It won't take long to retrain your motor system."

"I hope not. Well, let's test the new blinkers. We'll start with a membrane of metastatic cells from your larynx, Maillon. Say"—he sniffed the air curiously—"what's that funny odor?"

"In a vague way," offered the woman, "it reminds me of a perfume. Haven't you been working here with rose oil derivatives?"

"Yes, but the bottles are always carefully stoppered, and there's never been any odor before. Must be something in one of the other labs. So, J. T., if you'll kindly prepare . . . No, wait a minute."

He walked over to the reagent shelf, reached awkwardly for a quart jar, uncorked it, and sniffed cautiously at the orifice. His nostrils wrinkled in disgust.

"The odor can't be from Piggy's International Insecticide sample—it's malodorous."

"Concentrated perfume is always malodorous," said Maillon.

"Hmm." After a couple of misses, Blaine managed to thrust a stirring rod into the fluid. He drew it out, examined the clear syrup glistening at the tip, and then handed the rod to Blanchard. "J. T., would you mind fixing me a membrane of *that* for the electron mike? I'd like to see how much I can step up its magnification in conjunction with my snooper eye, but I'm too awkward as yet to prepare a membrane myself. And anyway, my eyes need a rest. The retinas are overheating and it's a bit painful."

Half an hour later Blaine's brow corrugated slowly into a puzzled frown as he adjusted the potential of his portable power pack.

"Definition quite satisfactory, but I don't recognize what I see. Too small for algae and too big for protozoa. Seems to be some quadricelled animal with very thick, resistant membranes. May account for its hardihood in that turpentine base." He adjusted the focus slowly, turn after turn. "Hah! Our microbe is breaking down the turpentine into smaller things. Magnification is now tremendous—of the order of X-ray crystallography. Shadows of individual molecules plainly visible. Here's one that looks like a

sawtooth. Get out your pencil, J. T. Seven carbons on the chain, with a methyl on the second one and probably ethylol on the sixth. The close binding between the second and third carbons seems to indicate a double bond. Got that?"

"Sounds like geraniol," stated Blanchard, the cold blue light from the fluors glinting from his balding head. "Anything else?"

Blaine laboriously described two others.

"Citronellol and stearoptene," declared Blanchard. "Let me smell that bottle."

HE WRINKLED his nose wryly, then with a pipette transferred a drop to a liter beaker of water. This he stirred vigorously, while a beatific smile stole over his face.

"Take a whiff," he invited his daughter.

"Well, find me dead in Saks Fifth Avenue! From bugs, rose oil!"

"Exactly!" agreed Blanchard. "Blaine, you've just made a billionaire out of a poor little millionaire corporation. What they used to sell for thirty-five a quart is now worth thirty-five an ounce, wholesale. Why every woman in the country can buy a drop of this culture at the dime store within a few months and grow her own rose perfume."

"You're wrong there, Father," laughed Maillon. "If it's going to be that common, no self-respecting female will ever use it again. What do you think, Blaine?"

"It's just barely possible," said Blaine slowly, "that if we injected some of this culture into the blood stream, our new microbe would contribute enough enzyme to these hay-wire cancer cells to put them under hormone control once more. Then, of course, they'd gradually die. I'd like to see what a few of these animals will do to a cancer colony. Now, J. T., if you will kindly prepare a specimen from Maillon's larynx."

* * * * *

Blanchard strode nervously up and down behind his desk.

"Further discussion of this will get us nowhere," he said to his son-in-law. "You're out as director and Blaine is in. The trustees met again just fifteen minutes ago and it's all over now. I might add that you would never have been elected director in the first place, despite Maillon's insistence, if I had known that you planned on adopting such a mercenary policy. The gap between you and the man who cured my daughter is simply abysmal. I knew it all along, but since his

miraculous eye and cancer discoveries have been announced, even the public videoscopes have been howling about it."

Pickerel Follansbee smiled mirthlessly and lounged deeper into the plushy armchair.

"Speaking of videos, just two days ago Maillon asked you to have me elected director, instead of Blaine. Did you wonder why?"

Blanchard stared at his son-in-law. "You brought the note from her yourself, didn't you? I know you read it." He scooped open a desk drawer, pulled out a folded piece of paper, and mumbled: "'Dad—you'd do me a favor if you asked the other trustees to appoint Piggy to the directorate until I'm either dead or cured.' She was dying, and I'd have done anything for her—even make you director—though I must admit I don't know why she asked that."

"But now Blaine has put her on the road to recovery. She's up, walking around, takes Naida along in the wheel chair. So I can't see any reason for keeping an incompetent wretch like you in that high office of trust any longer. You can go back to your shoe polishes."

"Floor polishes," corrected Pickerel, touching his fingertips together benignly. "Do you know why she gave you that note? No, of course you don't. I made her write it." He leaned forward, eyes snapping darkly, but still smiling. "I told her that I'd expose her love for my brother, and his for her. I told her I'd smear it on every video-scope in the country, if I weren't made director. She wrote that note to save a lot of people, including you and Blaine, from—shall we say—embarrassment?" He plopped back with confident assurance. "So you see, for the honor of the august houses of Blanchard and Follansbee, you may find it convenient to recall your stooges and take another vote." He yawned luxuriously. "I've loads of time. The evening scandals won't show for two hours."

"Maillon? And Blaine?" mused Blanchard. "Of course. I've been blind. Written all over them." He sighed and dropped into his swivel chair. "Piggy, I wish you were dead."

Pickerel nodded sympathetically.

"But that doesn't alter my decision. Blaine's still director, not you. Furthermore, if you ever make my daughter unhappy again, I'll hunt you to the ends of the earth and strangle you. Get out."

Piggy glared at the industrialist in brief, bitter hate. Then he got up and strode angrily through the door . . .

By the light of his desk-fluor Blaine Follansbee watched the laboratory door slowly open. He put his right hand under his desk, touching the fluor switch, and turned his eyes away from the door. Since his new retinas, unlike the old, were uniformly sensitive over the whole hemisphere, he could see as well out of the "corner" of his eye as he could along its optical axis—or better. And he wanted to give the stealthy intruder a feeling of confidence and domination.

He watched, fearful but elated, as Pickerel's contorted, upside-down face peeked in, first at him and then carefully about the lab.

The next question: Would Piggy shoot from the balcony, or come inside?

The fat man stepped silently within the door, continuing to study Blaine closely, and appeared to listen. The campus was extraordinarily quiet. Somewhere within the building a cricket was creaking. Blaine wished fervently that Piggy would hurry. He had been using his eyes for half an hour already, and they were overheating.

PIGGY'S fat hand dived into his coat pocket and surfaced with a needler. He drew careful aim at his brother's averted head.

Blaine turned slowly and listened to his own voice. "Before you kill me, please answer one question."

The intruder hesitated.

"It's about Maillon's cancer," continued the scientist smoothly. "That metastatic strain was an extremely virulent one developed in this very building. Two weeks ago, by a strange coincidence, a jar containing a sizable bit of that culture vanished. I'm not asking you *whether* you grafted some of it into your wife's operational wound. I'm asking—*why*?"

"You're just guessing," said Piggy between his teeth. "You can't prove a thing!"

"I realize that," admitted Blaine. "But it was a reasonable assumption, wasn't it? A request forced from his dying daughter to make you director would have a lot of weight with Blanchard." His fingers began to squeeze on the fluor switch. His eyesockets were frantic with pain. "But then we come to another difficulty. How did you know the office of the director would fall vacant so soon? How could you be positive Father

was going to die, unless you had already planned to mur—"

He ducked and snapped the switch. From behind welled out the odor of hot metal, and he knew the needler bolt had hit the filing cabinet. The smoking steel plates filled the room with the glow of infra-red. He turned off his power pack and rested his burning eyes a few seconds.

Finally, he peeked cautiously over the desk. Piggy was backed up against the reagent shelf and was looking wildly in all directions. To the human eye it was pitch dark. Blaine thought a moment then smiled grimly and hurled his desk dictionary at the lab door. Piggy fired futilely at it as the portal slammed shut.

The fat man's cheeks were strangely transparent, and his facial hair roots plainly visible, making him look as though he needed a shave. There was something odd about the eyes, too. The whites were almost dark. Either they were nearly transparent to infra-red, showing through to the black retinas beyond, or else they reflected little of these long invisible waves. But no time for conjectures!

The scientist quietly picked up a long mailing tube, held the end a few feet to his brother's right side, and whispered.

"Piggy!"

Another blast.

Then on the left side.

"Piggy!"

A fourth crash announced the fall of the electron microscope. Piggy blasted at that, too. Five.

Softly, Blaine put the tube aside and stood up.

"One more, eh, Piggy?" he laughed. "You've got to be sure, this time. Do you know why you've got to be sure? Because there's a trick catch on the door. We're locked in, and I've got the key." He was ordinarily a poor liar, but he knew it would sound logical to his brother.

Piggy peered toward the desk and took a tentative step, needler pointing generally at Blaine, who immediately tiptoed around to the other side.

"Piggy, few people learn as much in the last minute of their lives as you're about to learn. You ought to feel grateful. And where did you get that horrible blouse? Won't your collar stay down without buttoning it?"

His brother lurched back fearfully. "It's

dark! You can't see me!"

"It's dark? Well, so it is. I keep forgetting. Why Piggy! You're perspiring! Better wipe off a little of the sweat, before you drown. Look in your lapel pocket—you'll find a white handkerchief with a dark border. Use that. And look at the kid gloves! So you didn't want to leave fingerprints!"

He laughed heartily, then jumped as a white-hot beam flashed by his side.

"All right." His voice was suddenly cold, hard. "If you want to sit down now and dictate a confession for the D. A., I'll unlock the door and give you five minutes before I call the police."

"And if I don't?" whispered Pickerel hoarsely.

"I'll kill you." Blaine's big hands doubled unconsciously, and it occurred to him that he was no longer bluffing.

He watched deep lines twisting up and down his brother's face. Piggy was weighing chances, wondering how far he could get. Suddenly the fat man flung his weapon at his brother, turned, and laughed mightily at the lab door. It vanished in a shower of glass and plastic. The thunderstruck scientist heard a shriek of horror and a dull, heavy crash.

And then nothing.

Through the shattered panel he saw the wooden braces—now broken—that had served as a temporary balcony rail for the past two days, and he knew that Pickerel Follansbee now lay on the same cold bier so lately occupied by their father.

Somewhere within the building a cricket chirped away in cheerful insect solitude. . . .

TORING knew before he punched the "In" button that it would be Rachs. The black eyes came into focus and gleamed at him with malevolent interest. Dissecting scalpels preparing to lay bare a corpse.

"I called as soon as I learned about Pickerel and Blaine," declared the older man. "How do you feel?"

"How am I supposed to feel?"

"Exhausted, confused. The conviction that you are indirectly responsible for two deaths in your immediate family should have left your mind as limp as a rag."

"You aren't far wrong. Rachs"—Toring leaned over the desk with almost impersonal curiosity—"has my biostat stopped?"

The jet eyes blinked, then narrowed sharply. For a long moment each man searched

the soul of the other. Then Rachs rubbed his chin thoughtfully and looked down.

"Your statement conceals tremendous implications, some of them rather paradoxical. Presumably you contemplate suicide to atone for the deaths of your father and brother. In your own foolish way, you regard yourself as indirectly accountable. Then it occurs to you that if you are going to die, your biostat must have predicted your death."

"For once, your famous insight has failed—"

"Don't interrupt." The older man frowned, warming to his theme. "You've probably been thinking as follows: 'Free will gives me the choice of living or dying. If I choose to live, my biostat still runs. If I choose to die, the 'stat stopped three days ago. Which to do, live or die? By selecting my future I select my past. By the exercise of free will I establish determinism, and so deny free will.' Right?"

"I've considered all that, and more too," replied Toring quietly. "For example, suppose that my father's biostat predicted not just his death, but—his agathon. That would make me a co-murderer in the purest sense of the word, wouldn't it? But all this speculation leads nowhere. Just answer my question."

"But it does lead somewhere! With all that soul-searching and brain-scratching, your mind now ought to be sufficiently elastic and sensitive to attempt a general reorganization of a deranged cerebral cortex—psychokinesis—the goal you've been working toward. That is, telekinesis applied to individual neurons, and so on up to neural patterns and lobal nets. What do you think?"

"An hour after Piggy died, I came to the same conclusion, and I'm finally going to try psychokinesis. The subject is on her way over now. And in this connection I'd like to know about my bio—"

"You can do it. Be sure to set up the tele-encephalograph on your mind. Afterward, we'll want to know precisely what happened."

"My biostat?" reminded Toring patiently.

"Oh, that." Rachs looked faintly sheepish. "I must confess I've been worried about it myself. The stylus jiggled rather erratically a couple of days back, which would correspond to a little after midnight tonight, your time. But it's still running."

"In that case"—the preceptor's voice carried an icy edge of triumph—"your miser-

able agathon program is finished. . . ."

Blanchard wheeled the girl into the study. The dark moon face hidden behind the white hands was perhaps a little thinner, but Toring noticed no other change.

"I'm not asking questions," said the magnate in a low voice. "I'm simply very grateful, whatever your reasons for taking her out of turn."

The Freudian glanced absently at Blanchard. Considering the strange and terrible thing that would happen soon to Naida he should feel pity for the man. He felt nothing.

"Has the D. A. released Blaine Follansbee yet?" he asked.

"He's holding him for further evidence. There weren't any fingerprints on the gun, and he wants to make sure Blaine didn't use it against Piggy instead of vice versa. If we could prove that Piggy was a dangerous character, then Blaine would have a good case of self-defense. Blaine thinks Piggy killed his father, and tried to kill Maillon. But we can't dig up a shred of evidence."

"I see. But don't be discouraged. I think Naida will soon be able to tell us something very interesting about Piggy . . . This is going to require several hours. I don't expect to finish before midnight. Perhaps you'd better wait in the other room. You can look through the little window in the wall from time to time to see how we're doing."

Blanchard wiped his face with his handkerchief, nodded nervously, and left the room.

The Freudian wheeled up the tele-encephalograph, tested the tape mechanism, and tuned it to his cortex. Then he sat down in a chair about ten feet in front of Naida and forced himself to relax. For the next quarter-hour his mind must be a precision instrument, perfect, invariant.

A tiny slip of telekinetic force, an incomplete understanding of a group of association centers, and the child-woman would never leave her coma. His battle against Rachs and the agathons would be lost. Blaine would go to trial for manslaughter.

But he knew he would not fail.

HIS approach was like the old mystery story in which the thief filed his fingernails to the quick in order to determine a safe combination. His own mind, abraded to the quick by doubt and worry, had finally found the combination to another human intellect.

The girl breathed slowly, rhythmically, like a hibernating animal.

He held his breath for a moment, as his mind began to probe gently at her pliant mental shell, easing through into the superior frontal gyrus. "Inside" there was some disorganized and ineffective attempt to bar him. He was reminded of a little animal burrowing ever deeper into a bank of forest leaves. But he moved slowly onward, with infinite patience, taking extreme pains not to frighten his sensitive quarry into forever-protective madness. At snail's pace he groped up and down the cortical corridors, cumulating, integrating, and understanding.

As he analyzed the chaotic wounds that Piggy had left, wonder grew within him that his splendid father could have sired such a creature. Yet, in view of what he himself intended to do to this mind a little later, he doubted there was really so much difference in himself and his dead brother.

With firm, unhurried care he methodically reactivated the shock centers, with their accompanying horror memories, but simultaneously placed the thalamus under partial paralysis, so that no stimuli from images of Piggy would be transmitted to the adrenals. According to the James-Lange theory of emotions, if Naida's ductless glands were inactive, her brain would view such memories objectively and feel no fear.

She stirred uncomfortably, as in a troubled dream, but finally she lay limply against the back of the wheel chair, eyes shut, hands in her lap, breathing slowly.

With grim satisfaction the Freudian arose, switched off the tele-encephalograph, and returned to his desk. The tapes in the machine held the secret of psychokinesis—the one good fruit of the Follansbee agathon. How Rachs would rave! He could almost see those two eyes flaming now.

And now for his own coup.

He would use a specialized form of psychokinesis that he believed would not be rediscovered for generations. Rachs really had no conception of the horizon of the Follansbee mind.

The agathon system was breathing its last.

He punched his call box. "Registrar? Toring. Please cancel all further sittings that you have listed for me."

"You mean, all for today?"

"All for today. And tomorrow. And next week. And forever."

He disconnected the box and looked at his

watch. Eight P.M. Three hours to blood-change. But he'd change now. He would need every ounce of energy he could command.

He opened the cabinets on either side of his chair, thrust the sterile needles deftly into his arms, and started the little motor that activated the vacuum and pressure apparatus. From his desk drawer he took an airblast syringe and measured a shot of stimulant, something he hadn't touched since the last day of his University exams.

A superb glow infused him as he turned again to Naida. With easy confidence he refocused his mind on hers.

Blanchard, standing second in line before the little window, felt the discomfort and apprehension of a neophyte attending a potent pagan rite. He glared at his wrist-watch impatiently—it was nearly midnight—and tapped the nurse ahead of him on the shoulder.

"What're they doing now?" he whispered.

"No change," she whispered back. "Oh, you're the father, aren't you? You may have my place now if you want it."

His head bobbed gratefully, and the woman pushed her way to the rear, where she was taken in tow by a bevy of other curious nurses.

Blanchard snubbed his blunt nose against the plastic pane.

His daughter was standing before her wheel chair, her right foot half a step in front, her arms partly outstretched, palms forward, reaching for something invisible.

The hair on his arms and neck stiffened for a moment as he studied her radiant face. The eyes were wide open, but Blanchard could have sworn they saw nothing. The full lower lip, red without rouge, was parted from the upper in an unspoken question. As he watched, the lips moved slowly.

The man she faced was carved from gray obsidian, and from beneath his weary stone eyelids two chatoyant jewels transfixed her. Rivulets of sweat had gradually furrowed that adamantine cheek during the hours that Blanchard had watched, and the gray robes draping the statue glistened with perspiration, which, coupled with the systolic surging of the chest, gave a curious illusion of a real human being.

The industrialist shook his head dizzily. The line between the real and the unreal was becoming too thin for comfort. Then, to his indescribable relief, the statute stood

up, snapping the blood-change tubes like threads. Naida took another step forward, lips again parted, eyes still dissolved in wide wonder.

BLANCHARD turned and waved a hand in silent frenzy, demanding quiet. The hall became still.

"Is it a dream?" Naida asked the gray man.

Could that be Naida's voice? thought Blanchard. It sounded like—Toring's.

He strained his ears to the panel. The silence was growing longer. Finally he heard the tired voice of the analyst.

"You know it is not."

Naida put her hand to her brow and straightened slowly.

"Yes, I know."

The Freudian nodded in grim approval. "The first thing you must do is talk to Blan— . . . your father. Tell him about seeing Piggy plant that metastatic carcinoma specimen in Maillon's incision, and what he threatened to do to you when he caught you watching him."

"I shall."

Toring smiled. Napoleon after Austerlitz, or MacArthur aboard the *Missouri*.

"Let's call him in now. You know where to meet me afterward. For the present, be careful; later, merciful. . . ."

Chin cupped in palms, Toring leaned over the balustrade of the high bridge. Beneath him the moonlit rapids of the Potomac frothed their way into the broader channel downstream, toward a distant freedom in the sea. A cold wind whipped about his sweat-soaked robes, and he trembled uneasily.

From somewhere overhead a light flashed at him, and then a jet sedan struck the roadway of the bridge and careened into the opposite balustrade. Naida leaped out and ran toward him on her toes, like a little girl. She pulled up before him, lips characteristically half-parted, dark eyes clothed in moon-shadow but clutching at his. Her chest was rising and falling rapidly in her white blouse and tweed jacket.

"I hurried as much as I could," she panted. "They released Blaine."

"Good. There's nothing to detain either of us. You'd better return."

Gently, the girl put her hand on his sleeve and looked up at the Freudian.

"Are you really going to—"

"You should know."

She looked down the river, apparently lost in thought. Her fingers tightened on his sleeve.

"Yes, I should know," she mused. "After all—"

"Yes, after all. With immaterial differences, your mind is—my own. I reproduced on your cerebral cortex my every neuron, every synapse, every neural path. For the present, the mental entity that inhabits the skull of Naida Blanchard is actually myself, but it is superimposed upon the original child-mind.

"So there are now two minds attuned to my biostat. One mind dies, but the other lives and continues to activate the 'stat." He laughed sardonically. "Poor Rachs!"

She looked up earnestly. Her hand slid slowly up his sleeve, over his shoulder, and to his cheek. "But I differ from you more than you think. Even during the past hour I have changed. I know now that I am—Naida—and that you—are you."

THE analyst's eyes narrowed in sudden concern.

"Since I am not narcissistic," he muttered, "I should have realized the change in you by your attempted caress. Already your sex has begun to assimilate and rework my—your—mind along feminine lines. Perhaps I shouldn't have waited to learn about Blaine. I can only hope you haven't changed so much that you've lost contact with the biostat."

"I think it's too late! Don't jump!"

His eyes flicked across her face in brief, startled appraisal. "The identity with my

own mind has become uncomfortably tenuous. And yet, my biostat still runs. Which means—"

"That you won't jump!" whispered the woman tensely, pressing her palm to his cheek.

"—that I *will* jump, and that you face a full, useful life as yourself, probably in the Lodges. And remember, even if your body ages, your mind need never die. But we waste time. Return to your jet and don't look back."

In one fleeting moment he looked through her, through the bridge that separated him from death, through the river, the earth, and the stars beyond. Then he took her hand quickly, kissed the warm palm, and dropped it.

"That's for Naida—the first immortal."

(Confidential to all Preceptors)

Psychokinesis is but a few days old and as yet not susceptible to a comprehensive evaluation. However, preliminary case reports indicate that Toring's new technique, as revealed by the T-E tapes, has advanced psychiatry by many centuries.

It is tragic irony that this gigantic Freudian could have healed, at the time of his passing, any suicidal psychosis on earth save one—his own.

Also ironical is the failure of his biostat to predict his own death. The machine, after an incomprehensible quaver of the kymograph, continued to run even after the fact of his suicide had been fed to its integrator webs.

This one divergence in the ninety thousand confirmed biostat histories proves that ultra-temporal mechanics cannot escape Heisenberg's uncertainty principle. Since we can never be absolutely sure that a given agathon is not actually a murder, the agathon program will be discontinued immediately and the biostats destroyed.

Man, it seems, is not yet God.

*For the Council.
Rachs.*

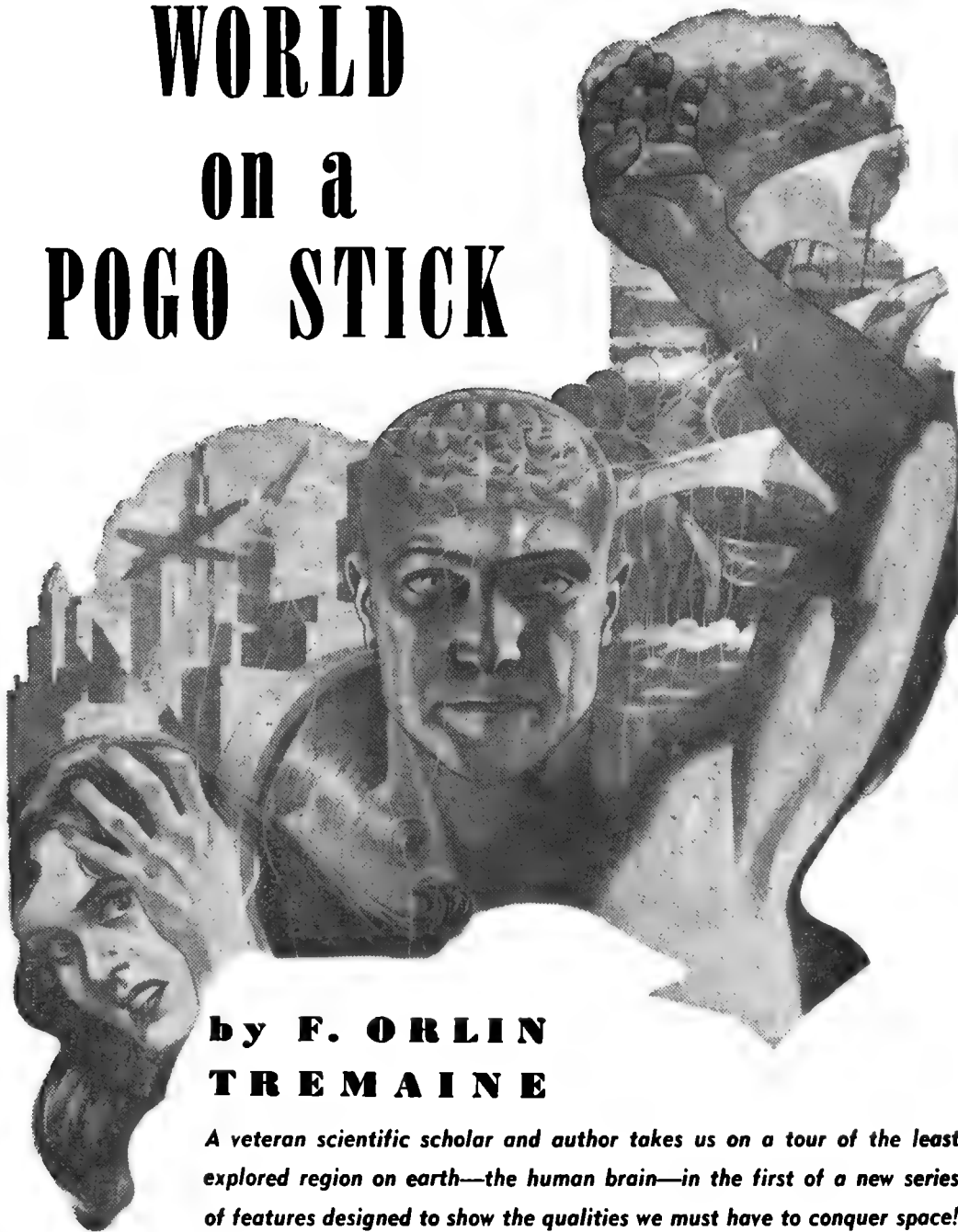


COMING NEXT ISSUE

MONSTERS FROM THE WEST

An Orig Prem Novelet by BENJ. MILLER

WORLD on a POGO STICK



**by F. ORLIN
TREMAINE**

A veteran scientific scholar and author takes us on a tour of the least explored region on earth—the human brain—in the first of a new series of features designed to show the qualities we must have to conquer space!

NOT only is the world bouncing along on a pogo stick—it is also scared! As a whole it doesn't know how far the stick will go on each jump, or in what direction. It doesn't know how it got on the thing. It doesn't know how to get off! And

this unpredictable pogo stick is a thing called "nuclear fission."

Dreamed into existence in science-fiction, jelled into actuality in science laboratories, atomic energy represents too vast an advance for most of the world's people to com-

prehend. What a man doesn't understand, he fears.

The vast majority of the earth's population today is in the same position as an old colored man found himself more than a hundred years ago. He had crossed a swamp and had come out on a railroad track, the first he had ever seen.

It was like a road, and yet it wasn't. The steel rails stretched in both directions, but the floor of the road was awfully bumpy. There was a lot of space between the boards! It was dusk and suddenly a train bore down on him.

It roared like thunder. It cast flashes of lightning out its sides. A great eye threw its light right on him. Naturally he was scared and ran, away from the train, down the track, shrieking, "Lord, save me. The devil is after me!"

Just before the train overtook the old man he changed his direction and was a good three yards off the track as it swept past with a roar and disappeared in the distance. When his trembling stopped the old man got to his feet and looked after it. "I fooled him, that time," he said. "Jest imagine. He can only see straight ahead!"

But the train was not a mystery to the inventors who dreamed it into being, or to the engineers who perfected it and built it. They knew it represented a new age—the age of steam, when steel bands bound the nation into a unit and ended forever the slow hardships of the overland trails with their covered wagons.

Slowly but surely civilized men adjusted themselves to the age of machines. They adapted themselves to the new environment with its increased tempo. It became a part of life so that, by the time the grand-children of these men were born, the *machine age* was an *expected environment*. Men were living in a period of progress, yet the backward ones were afraid of trains for a long, long time.

New Age of Wonders

Today we are living in the most exciting, fascinating years in the history of the world. A new age of wonders is rushing toward us through time with the speed of a supersonic plane. We are moving into a new and unknown environment. New experiences lie ahead. And what happens? The world gets on a jittery pogo stick and

bounces back and forth, terrified. Why?

The reason is simple. Civilized man has slowly adapted his brain, body and nervous system to the changes which turned the past into the age which is ending. But only the more advanced thinkers, the scientists have kept pace with the new age which is becoming a fact with lightning speed.

You and I have dreamed about space-travel. We've read stories about it until a trip to Mars seems commonplace. Now we are on the verge of seeing interplanetary travel come true. Many of us will live to see spaceships take off from the earth. But it's going to take a lot of adapting on the part of the vast majority to get accustomed to the wonders that are coming.

To this day, and we've had airplanes since 1903, millions of people refuse to travel by plane. Of course other millions do travel by air—more every day. And those who do not fly have become accustomed to seeing planes drone past overhead.

People under thirty years of age take flying for granted because planes were common when they were born. Their children are coming into the world with air travel as a part of their "*expected environment*."

That means their nervous systems *inherit* the adjustments made to environment by their parents and grandparents. To them there is no great wonder about man's ability to fly because he was flying many years before they were born.

Coming—Atomic Power

We know in a general way what the next dozen years will bring. There will be atom-powered motors to drive battleships at previously unheard of speeds. There will be other motors, when the testing period is past, to run passenger ships and trains and planes and private cars.

Sealed motors will be set up on isolated ranches—motors which, once started, will run continuously for fifty years! The only requirement will be occasional lubrication. We know all that. But what do we really know about ourselves?

We've studied and analyzed everything on earth, animal, vegetable and mineral—except our own brains! Isn't it about time science fiction opened that door? Let's try to find out what makes the dynamo operate. Maybe we can get this world off its pogo stick and settle down to living!

You probably studied your anatomy and biological data well enough to know the way the life-cell is formed, with the chromosomes and genes pairing off to determine every feature and detail which makes up your physical body. Did you ever stop to think that this hereditary planning also applies to your brain?

Many of us are apt to think of the spinal cord like the little boy who told the teacher, "The spinal cord is a rope that holds the backbone together. Your head sits on one end and you sit on the other." Actually it is a signal system that puts a Western Union cable system to shame!

The brain is the greatest thought manufacturing plant the world has been able to produce. We know that, of course, when we stop a moment to consider it. Yet it is only within the last half-century that psychiatry has grown to popular acceptance!

Psychiatrists are the garagemen, the mechanics, who tune up the mental motor when it doesn't work right. Maybe my reference isn't properly respectful—but that's what they are. And we've had *airplanes* as long as we've had *psychiatrists*!

Mecho—Madness

But wait a minute! There's a point there. Until our inventions began to outstrip our ability to become adapted to them quickly, perhaps men had no need for psychiatrists. It's machinery that has tended to increase the rate of insanity, the doctors tell us—machinery and noise, concentrations of population, the *roar* of the city.

A low hum that never stops until you run away to the country to get away from it and rest. It will require at least three more generations before the roar of the city and the constant hum of machinery becomes an *expected environment* of the newborn children.

Meantime the brain goes on producing thoughts continuously, and the combined brains of our scientists continue to think of new elements of the earth to conquer. Each of us, during his lifetime, supplies some constructive thought which works for the good of all mankind.

That is because we are individuals, living individual lives—not slaves, thinking as they are told to think. But do you know *HOW* thoughts are formed? Very few people even stop to consider that, yet it is simple even while it seems complex.

Did you ever look in a mirror at your own image and snap your fingers because it *reminded* you of something you had forgotten to do? You probably have, or looked at something else that recalled something to your mind. That's what *reminded* means, of course.

Your eye signaled what it saw to the brain, which recorded that sight in the memory record. The recording nerve immediately signaled back, "This is a duplication—in part—of a previous recording," and immediately *played back* the other record.

That's when you snapped your fingers. It's as simple as that, like one of those complex business machines. Only the brain is *much* more elaborate than any machine ever made by man.

How Come?

How did it get that way? That too is simple. A single-celled animal requires a single nerve only, so it can feel. The more complex a body is, the more nerve ends are required to signal feelings of heat, of cold, of pain from a cut, telling the body to draw away from danger.

A body as big and complex as that of a lizard or a frog has nerves enough so that a central headquarters is needed to clear the messages. That central switchboard is the simple brain, which hooks the sight, hearing and muscular control up so they work together for cause and effect. It is the beginning of thought. Hearing or seeing danger makes the body immediately move away to escape.

In our human bodies we still have that simple nerve system with its switchboard, though it has become more elaborate. But in order to maintain control over the entire body our brains have developed a system of twenty such switchboards, like a huge telephone system.

They control the reflexes. They keep the heart going and the lungs and the other organs about which we never waste a thought unless we are sick. And these switchboards are self-operating. They are independent thought centers actually living within your brain and mine. Among them they make up the *subconscious mind*.

But over these switchboards is a master control office which we call the *conscious mind*. Much of the time this is the only part of the brain we realize anything about! Too

many of the people in the world are like that. So the world gets on its pogo stick and doesn't know why! It bounces this way and that, fearful of the unknown.

Fear Is Foolish

Fear seems silly, when you look at it that way and understand its mechanical operation. You never feel *fear* for anyone except yourself. You feel *anxiety* for someone else, but fear for yourself. Both are mechanical operations of the brain.

You may *fear* to get too close to a whirlpool. That is because twenty thought centers frantically signal to the master switchboard, saying, "We can't keep our systems operating if the body falls in. Past impressions tell us that from other generations."

And because these thought centers do not operate with words they can simply signal danger. The conscious mind, catching all these danger-signals coming at once, applies logic to them and associates them with the whirlpool.

The immediate reaction is to grab something, or back away.

But in that instant all the attention of the various control centers was given to signaling danger. Sometimes the intensity of the attempt to "get headquarters on the wire" is such that the counter signal to the muscles fails to get proper attention.

In that case the body doesn't move and we say it was "*paralyzed with fright*" or "*rooted to the spot*"—or even "*my heart stopped beating for a minute*". And that might be literally true!

On the other hand the anxiety you consciously feel for others is a logical reaction of conscious thought. You see a man in danger and pull him safely away from it. Meantime the recorded vision of his danger and your mental signals to your body to pull him back, have been passed through the thought-centers of your brain.

They did not *see* him, but they catch your thought and, immediately reacting to the impulse, respond with automatic danger thoughts. That is why you might say, "I was calm at the moment, but afterward I felt weak and trembly."

These independent thought centers, the reflex controls, were not developed by this generation. They are inherited brains developed throughout long ages of time. Their recorded memories are records of the past—

records more complete than we often realize. Unused parts of the body become atrophied, like the appendix.

But the brain doesn't atrophy. It is alive, pulsating, active every minute of every day from before you are born until after you die! Even while you sleep, resting your conscious mind, the brain is operating. The central offices are operating the heart, the lungs, the liver, the flow of blood—even, sometimes, sending messages through to the conscious in the form of dreams.

The Record Maker

We only use a small portion of our brain actively, so logic says the balance is the storehouse of memories. Every minute of your life is recorded there. You may forget some of those minutes consciously, but the record is there in the storehouse, set down for future reference. It needs only the right impulse to be recalled to your attention.

The independent thought centers which form the unconscious and keep the body functioning have memory recordings also. Their operation is not based on your conscious thoughts, but on their own—and those thoughts are based on the memory recordings of past generations, even of ages past when each was the only brain controlling its body. So the history of the entire race since life began is actually recorded in your brain. If only we could gain conscious access to these records and read them!

You will notice that I talk as though you had an ancestry that stretches back farther than the oldest royal families of Europe. You have, of course, one that goes back just as far. It can't go any farther! Life is continuous and every person alive today has an ancestral line as old as every other living person.

There is no such thing as an orphan from the standpoint of "*not having parents*." You might not know who your parents were. You might not know their names, nationalities or habits—but you *are* your parents and theirs to the beginning of time!

You have inherited their thoughts to some extent, their likes and dislikes, their aptitudes and skills. Like clings to like and if you pay attention to the things which appeal to your brain and body you will find your place in the world—and will carry on the multitudinous skills and arts developed by your ancestors.

The Chinese are an ancient people. Their habits and philosophy contain an ancient wisdom. The meaning of some of it may be lost, but we can always learn by observation. Sometime, in the dim obscurity of the past, they looked back to their ancestors for guidance.

Perhaps they held the secret of reading their *unconscious thoughts*, those which were inherited. If so they found wisdom there, and guidance. Isn't it just possible that, as the years drifted into centuries and they lost this contact with the unconscious mind, the legends of ancestral wisdom became "*ancestor worship?*"

There is reason behind everything man does in this world. Sometimes we don't *see* the reason—but it's there.

Primitive men in the very dawn of civilization tried to blank out the thoughts that originated in the unconscious mind and govern their actions only by conscious thought. They did this because the unconscious was too often governed only by unbridled emotions and savage reactions.

It was necessary for men to restrain the desire to kill just because they were angry if they wished to live together. They succeeded in putting up a curtain between the conscious and unconscious—succeeded only too well!

Because, as the centuries of civilization passed, much that was stored in the unconscious was no longer unbridled emotion but helpful experiences and knacks and skills—and warning against the mistakes made by recent generations.

Road to Success

The ability to accept the messages sent through to the conscious mind on occasion, actually to work with the skills and desires of one or more of the stronger thought centers, inevitably leads to success. It combines the hereditary knowledge gained in a past generation with the conscious guidance of a mind educated in the present.

This ability is sometimes called *genius*. Please note that the word *generation* could easily be spelled out as *gene-ration*, and the word *genius* could as easily have been developed as *gene-ius*.

Invention results from thought, so the preparation of both body and mind for the acceptance of new conditions must also come as the result of thought. And thoughts are

created through the reflections of past experiences, plus the logic of the conscious mind, bringing them into perspective with the present. A purely mechanical operation—mental mechanics! But where does that leave us? We want to get the world off its pogo stick.

Well, it leaves us with a new respect for the study of genealogy, not for the sake of knowing who your ancestors were but of learning what they did best—of finding out their physical weaknesses so the doctor will know what causes trouble when you are seriously sick with a heart ailment or some other hereditary difficulty.

It leaves us with the knowledge that the fears which the world has of the new age that's coming are due to the fact that we face a new experience.

We know that the fears come from the unconscious mind—not from the forward-looking conscious mind.

It leaves us with a tremendous respect for the Monk, Gregor Mendel, whose experiments with garden peas proved that hereditary lines can be traced through a single parent and that characteristics are hereditary. In a later article we shall demonstrate how accurately Mendel's Law applies to the human brain and how each of us can determine for himself what he can do best.

A New Understanding

It leaves us with a new understanding of our own brains. We know, suddenly and clearly, that the brain is like a twenty-mule team, and that the conscious mind is the driver. Every one of the mules has an independent thinking brain—but the driver harnesses them and keeps them in line.

He makes them work for him, makes them pull his load, keep in line and behave. If the road were suddenly blocked by some unknown force—say a gigantic steam-roller—perhaps the mules would tend to shy, or kick, in panic. But the conscious mind would hold a firm rein, would calm their fears and drive them past the obstacle.

The driver has logic to help him calm the mules. He knows the road-block is only a machine, whereas the mules know only that they have never seen anything like it before and that it must therefore mean sudden death!

This then is the secret of why the world is on a pogo stick! The vast majority of the

population is influenced by fears created by the unconscious thought centers in the brain. Past generations have never experienced anything comparable to nuclear fission. They do not understand it and, like the mules, feel it can only mean sudden death! Where are the conscious minds, the drivers? Why have they lost control?

Once we think our way through to understanding, fear fades because it is simply the defensive reaction of instinct against the unknown. The brain not only adapts itself to the present development but conditions the nervous system to accept the future.

Nuclear fission, in chain reaction, has already meant sudden death—yet the world lives! Even Japan lives—and faces a future free from “*thought police*” for the first time. Why not point out the glories of the new age that nuclear fission can bring to the earth?

Let's Get Around

You and I know what it can and will mean because our thoughts are free to roam the galaxies. For many years we have been thinking in terms of this age that is now upon us, and have lulled the fears which existed in these thought centers of our unconscious minds.

But the world at large is not as well prepared as ourselves. Much of it is backward from our standpoint. Its peoples are not taught, as we in America have been, to think freely the thoughts we desire to think.

The logic of the conscious mind is constructive. It seeks new ideas and experiments. You and I do not want to stand still. We want to progress, mentally and materially, and the greatest unexplored area left on earth is behind your eyes, between your ears!

But suppose the conscious mind, the driver, loses control over his twenty-mule team? Ah-hah! Now we're coming to it. Suppose the mules reared and kicked, tangled the harness, backed against the wagon and made the rider fall out of his seat? At that moment the twenty mules would cease to be a team.

Each would struggle blindly, madly, to break away, to save himself. You can imagine the confusion, the screams, the brays, the snapping of leather against struggling bodies—all because there was no driver in control, no master control office to clear the signals.

You, as an observer, would know the mules couldn't break away. You would know that only tragedy and broken bones could result from their struggle. You would know instantly that the only chance of saving the mules was to help the *driver* regain his seat, get the reins into his hands and resume control.

In those two last paragraphs you and I have been exploring the brain—but fast. Read them over again if you didn't read carefully, because they give you an inkling as to what insanity actually is like.

Drive With Care

To work *with* your mules, understanding them but keeping them under firm control, is to get the most from them. But the instant they gain control over you your load is wrecked! Remember, each has a brain which thinks first of self preservation, but each of these twenty brains depends on your judgment and your firm guiding hand.

The mules may stop suddenly without your orders when you come to a bridge. If they do stop don't scold—INVESTIGATE. Perhaps the bridge is weak and they know it. That is how you get a *hunch*. Don't ignore hunches. They are messages from thought centers in the unconscious mind and there is a reason for every one of them.

And don't forget that when we talk about our twenty-mule team we are actually talking about the twenty independent thought centers in your brain. You (your conscious self) are the driver. You have tremendous power in your control if you can learn to use it efficiently.

The average person lets the team meander along the road so long as they keep plodding along in the right direction. But that isn't the way to get the best results, either from a twenty-mule team or from your brain. There are bound to be one or two, perhaps three mules among the twenty who appear brighter than the others, more alert and ready to help.

One of them may like to help pull a load on the road, the second may have a fondness for carrots, the third may love to romp and roll in the pasture. If you are a wise driver you'll make friends with these three as best you can.

Let the one who likes to work with you be the lead mule, the guide at the head of the line. Be sure you raise some carrots for

the second one as his reward for helping with the load. And don't fail to let the third romp in the pasture at the end of the haul.

Battle of the Brains

Is that picture clear? The conscious mind is apt to choose—and it should—the occupation desired by one of the stronger thought-centers in the unconscious mind. But there may be a desire *almost* as strong for some other type of work because of the heredity represented by a second thought-center.

Make that your *avocation*, your part-time work at home, your hobby, and that thought-center will cooperate to help make your main job easy so as to be rewarded later.

Let your *recreation* satisfy a basic desire also and you will be satisfying the third strong thought center in your brain. It too will cooperate to make your work more efficient because when the time for relaxation comes it will find self-expression.

These are the elements in life which create a well-balanced personality. There is no place, in a brain which satisfies the desire of three thought-centers of its unconscious, for nervousness or for a feeling of frustration. With three satisfactory outlets of expression you cannot be frustrated. That is the way brilliant minds work and fear has no

place in such a program.

I suspect that science fiction represents the avocation of many of us. It is a good one. That is why we become interested in it. There is bound to be one strong thought center in a lot of us that wants travel, excitement, adventure, exploration.

Many of us had at least one ancestor who crossed unknown oceans seeking those very things and his traits may be descended to us in this thought center in the unconscious mind. Science fiction can satisfy that desire perfectly, because of the impressions made on our conscious minds and transmitted to the unconscious.

But the brain is not sufficiently easy to analyze to enable me to give a complete picture in these few pages. It is made up of traits inherited from a few—but *not from all*—of your ancestors. You had, for example, 64 great-great-great-great grandparents—and you are not descended from all of them.

You can't be, because there are only 48 chromosomes in the life cell! The odds are that you have gained important traits from not more than twenty ancestors—*three* of them are important to you. It is well to know how to find out who these three are. In the following issues a method will be outlined so that you can determine this for yourself.



IN THE NEXT ISSUE

F. ORLIN TREMAINE

Continues This Fascinating Series With

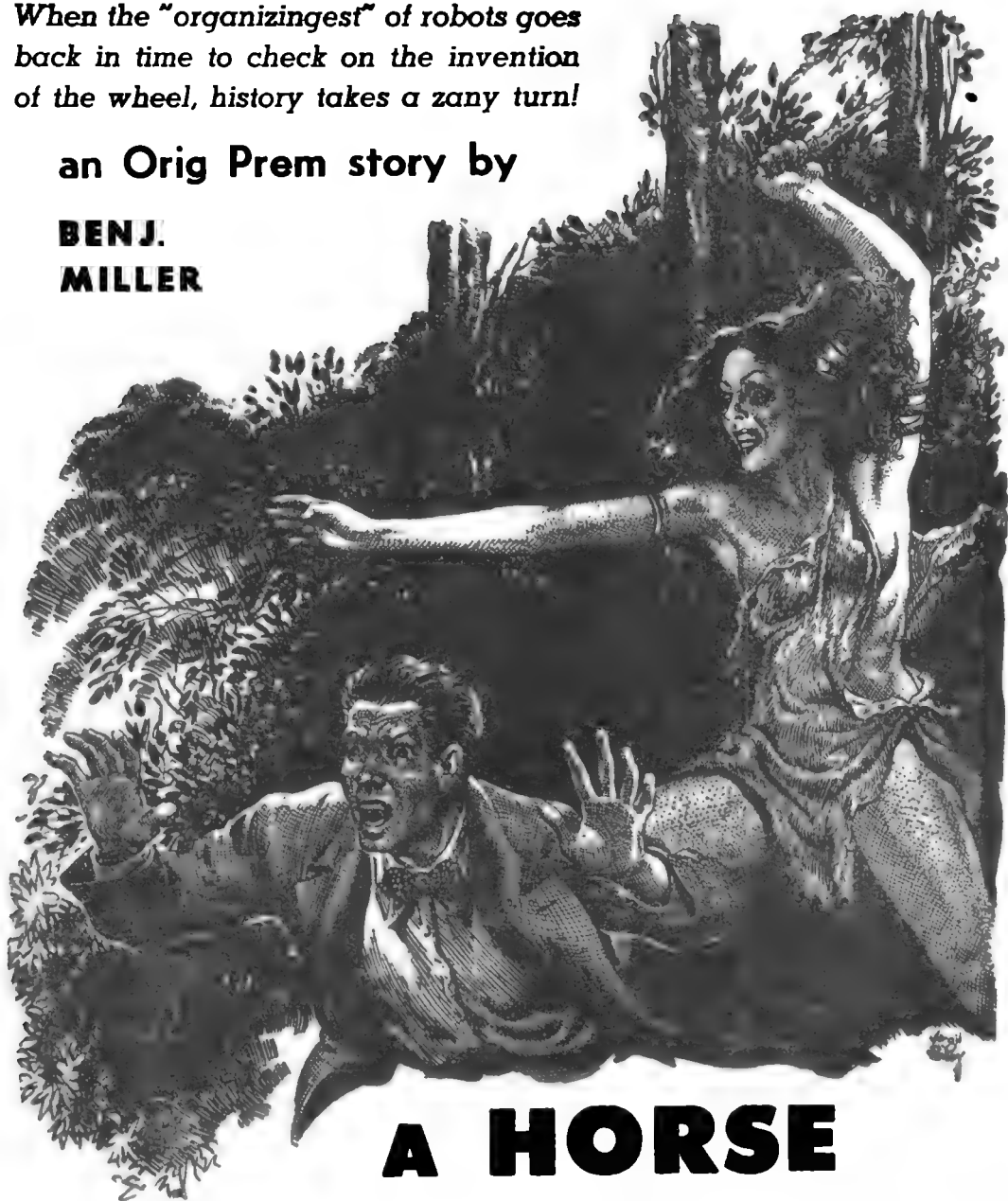
FROM PEAS TO HORSES TO MEN

Another Provocative Special Feature!

When the "organizest" of robots goes back in time to check on the invention of the wheel, history takes a zany turn!

an Orig Prem story by

**BENJ.
MILLER**



A HORSE

ON ME

NATURALLY a lot of strange things had happened around the Heptagon, but certainly never before the year 2232 had a giant copper-skinned Indian in feathers and full war regalia ever chased one of Solar News' star reporters through the halls of the Time-Travel Wing. And right at the time when Simullen was in an extra

bad humor and had threatened to fire the reporter anyway.

Every time old Pain-in-the-Face made a swipe at him with a flint hatchet, Stieve

Andro, panting for breath, would jump sideways and the dozens of Solar News employees standing in the halls would laugh at him.

But it wasn't funny. The sweat pouring down Stieve's backbone was real and the anxiety on his face was honest. Stieve was running for his life—and the Indian from 1492 was in a lot better condition than was Stieve in 2232.

"Help! Help!" Stieve's voice sounded pitiful, for it was all he could do to gasp the words out. But the technicians, gathered at the door of the Calendar Department, laughed uproariously. Stieve raced down the hall and leaped onto the fast walk and kept running.

The big Indian saw him getting away. He looked at the walk and then he stepped onto it. Immediately the walk yanked his feet from under him and he fell with a thud that shook the entire sixty-second floor of the Heptagon.

Stieve was just rounding the corner when he looked back. He groaned. The helpful technicians from Calendar were assisting the big Indian to his feet. The Indian came after Stieve with giant strides and in just about a minute he was breathing on Stieve's neck again. The hatchet grazed Stieve's right parietal lobe and very nearly clipped off his ear.

Stieve was tired. His feet were hard to lift. He stumbled. The big Indian fell over him. Stieve tried to get back up but couldn't. His muscles were so tired they were half paralyzed.

The big Indian got to his feet. The hatchet poised. He grabbed Stieve's hair in one hand. Stieve closed his eyes and prepared to face death with dignity. The Indian belatedly, "Now you behavior or I scalp you—but good!"

Stieve gasped. His eyes opened in hopeful incredulity. "Chief," he said, "that's a horse on me. What do you want?"

"Ugh! I from Guanahani. I from fourteen ninety-two. I was cop at arrival of Columbus. You remember me?"

"Yes," said Stieve with a sinking feeling. Smullen, the head of Time-Travel, would be furious when he heard of this. Smullen had enough to worry about already. It was bad enough to have an Indian that should have been a Minnesota fullback chasing up and down the halls with a hatchet—but what would Smullen say if Stieve got into a legal

tangle with the cops of 1492?

"I here on behalf of my daughter."

"Oh," Stieve wilted. "I didn't promise to marry your daughter, mister," he said earnestly.

"Oh, no. We not trying to find her a husband. But Orig Prem promissum her a screen-test. Where is screen test? On second thought, where is Orig Prem?"

"On third thought, let me up," said Stieve, beginning to see light, "and we'll figure this out." He sat up and looked around. He was surprised there wasn't a crowd there.

THEN he saw why. He almost fainted when he saw they were just outside of Smullen's office.

"If we don't get away from here before Smullen catches us there'll be plenty of trouble." He began to push himself up. The Indian gave ground slowly. But Stieve was a lot more afraid of Smullen than he was of the Indian. He pushed the Indian back and got to his feet.

"Come on," he ordered. "We'll have a cup of coffee and talk this thing over."

"Now, then," he said while he stirred his coffee, "when did this promise take place? You didn't say anything about it before. And say!" He was struck by a sudden thought. "How did you get into twenty-two thirty-two anyway?"

"Oh, that easy." The big Indian took four lumps of sugar. "This much easier than chewing sugar-cane," he said. "I jumpum in time-travel tube while your assistant, Orig Prem, lecturing to ladies' aid on Hollywood."

"Hey! When was this? Today, you mean?"

"As of fourteen ninety-two," the big Indian said gravely. "Or, rather, it fourteen ninety-three in Guanahani now."

"So that's the deal." Stieve nodded knowingly. "Prem, the robot, is back there making some extra change. How much is he charging the ladies to tell them about the movies?"

"Six bits a head. Me think that very high for fourteen ninety-two, but ladies' aid willing to pay anything to hear more about Hollywood."

"How many in the aid?" asked Stieve.

"Twenty-two."

"So," Stieve said between gritted teeth, "Prem, the little organizer, is at work giv-

ing the ladies their money's worth. Will I ever raise Cain with Medlock for sending Prem through without an authorization! Now look, Chief."

The big Indian drew himself up straight. "Me listen," he said gutturally.

"You go back to fourteen ninety-three and send Orig Prem home. Tell him I said so. And I'll promise you a nineteen thirty screen test for your daughter if I have to wring it out of Prem's steel hide."

"Hokay, chief. I mean, hokay, paleface. Pardon me, I chief—you paleface."

"That's a deal. Now to get you home. You can't go today. That's against the no-doubling rule." Stieve groaned. "I might as well hide you in my suite until tomorrow. Medlock will never let us through twice in one day. You can sleep on the divan in my private office tonight. I suppose Prem will sleep on the beach at Guanahani. I hope," he added viciously, "he gets sand in his joints."

For the first time in his seven years at Solar News, Stieve was up the next morning before a lot of people got to work. Such was one of the irksome developments of an entertainment policy of near-galactic dimensions which, via time machines and abetted by such robots as Orig Prem, brought happy audio-video listeners of the twenty-third century not merely re-enactments of famous moments in history but the famous moments themselves.

The results, thought Stieve, could at times be annoying, especially when they cut in on his sleep. However, a promise was a promise and he had the big Indian made up in his feathers and took him around to Transition and was standing there when they opened the door at seven.

Medlock, in charge of time-traffic, didn't like it particularly, but Stieve said, "I'm sure you don't want Smullen to know how you've been sneaking back to five hundred A. D. to watch the Mayas build their pyramids."

Medlock glared at him.

"Nor would Smullen, in his present mood, be pleased to know that you are in the habit of leaving your dope-headed android in charge of traffic."

Medlock swallowed. "That's just because you're a robot man," he argued.

"Yes, I'm old fashioned. But I want to say that I have no intention of telling Smullen anything." He made a gesture with his hands flat and parallel with the floor.

"Okay. Tell old Pain-in-the-Face to crawl in the capsule," grumbled Medlock. "But it's blackmail."

"Me not Pain-in-the-Face, me Chief Cook-and-Bottle-Washer," the big Indian said proudly. He looked at their wide eyes and added, "That Orig Prem's title for me. He say that a very fine old tradition of white man."

Stieve bit his tongue to keep a straight face. The chief still had his hatchet. "Look, now, Chief, just get in the capsule, will you, and send Orig Prem back here as soon as possible. If you don't, he'll have the whole island of Guanahani disorganized."

"Prem," said Medlock, "is the world's best organizer."

Stieve ignored the jab. "Pull the switch, Medlock, before things get out of control."

MEDLOCK pulled it. There was a blur and the time capsule disappeared. Stieve sighed with relief. "Now, then—"

The omnica bells sounded. Stieve turned. "Mr. Andro," said the voice, "see Mr. Smullen in his office right away, please."

Stieve looked back. The capsule was still gone. "Thank goodness," he said fervently. "Smullen can't prove anything now."

"No," said Medlock dryly, "there weren't over eight hundred witnesses to your foot-race yesterday."

Stieve glowered at him, but the omnica kept saying, "Mr. Andro, see Mr. Smullen in his office right away, please. Mr. Andro—"

Stieve unplugged the playback. "Coming," he said glumly.

Stieve could just see Smullen's bald head with the gray fringe around the top. He stood for a moment, quaking, and then he coughed. Smullen dropped his paper.

"Oh, you," he said. Stieve couldn't decide whether it was disgust or relief. But now he could get a clear view of Smullen's face, and what he saw was encouraging. Smullen was worried. The lines around his mouth were deep, and his eyes had brown splotches under them. In spite of himself, Stieve felt sorry for Smullen. After all, Smullen had put up with a lot from him and Orig Prem.

"What's the trouble?" Stieve asked.

"I had a report yesterday from the board. They claim the gross income from the nine planets for the last thirty days dropped almost a billion—twelve per cent, to be exact.

Jupiter pulled out half of their contribution and that hurt."

"What's eating on Jupiter?" asked Stieve.

"They claim we're taking it too easy. We're not giving them anything worth while."

Stieve exploded.

Smullen held up his hand. "It's political pressure, I think. The Outer Planet League is putting on the heat. But that doesn't help us. We've got to do something sensational or significant or we'll all be losing our jobs."

"They can fire *you*," Stieve said indignantly. "You're the one who applied time-travel to news."

"I'm afraid that doesn't cut any ice. *You're* the man who made the Three Hundred Years Ago Today feature the most popular in the Morning Telepaper too—but don't ever," he said ominously, "get the idea that you are absolutely indispensable to Solar News."

"No, sir," Stieve said hastily.

Smullen sat back, and his face was twisted with a big frown. "The worst of it is, three days ago I persuaded Murphy to take a leave from his Middle Ages Run in Europe to do a special on the sack of Samarkand by Jenghiz Khan in twelve nineteen."

"How did you ever get Murph to leave his soft berth in One Thousand Years Ago Today?"

"It wasn't easy," Smullen admitted glumly. "He had just finished the Crusades and he hollered for a rest, but I promised him double time and a month's bonus if he would do this feature for us. The trouble is, he has been in Samarkand two months by their time, and we haven't had word from him—and no timecast."

"Was his android with him?"

"Yes."

"That explains it," Stieve said positively. "You put an android back in time like that and they always get things balled up."

Smullen shook his head wearily. "I know you're a robot man, but I have no desire to referee a feud. All I want is a few good features on the ether. Correction—also I want to hear from Murph before his widow—pardon me, his wife—gets in the hands of a shyster lawyer who will sue Solar News for more than Murph could ever possibly be worth as a husband."

Stieve really felt sorry for Smullen. "Well," he said, "I'll tackle anything you have picked out."

SMULLEN looked at him as if to be sure. Then he pulled out the assignment book. "My idea is to take on a series of events that are important as well as spectacular. If they aren't spectacular, we can liven them up a little—fictionize them, you might say."

"Such as what?" asked Stieve, holding his breath.

"Well—" Smullen opened the book—"such as the invention of the wheel, one of the most important events in the history of man." He looked questioningly at Stieve.

Stieve's mouth popped open. "That means—"

"I'll tell you what the Probabilities Department gave me. They say about eighteen thousand B.C., just about the time Neolithic man went into Europe and began to cultivate the soil. The boys in Pre-History claim that the wheel should have come into use when man started raising crops."

Stieve felt a little pale. "You mean—you want me to go back before history? We've never done that, Mr. Smullen."

"All the more reason," Smullen said, "why it will go over with a bang now. We could have a whole series, like the invention of the first animal trap, the invention of the screw, the discovery of mathematics. It could be an excellent series—and I really think, Stieve, that you're the man to do them."

Stieve was resigned. "Knowing you, I'm very much inclined to agree that you would think that."

Smullen ignored it. "Fortunately or unfortunately," he went on dryly, "you have no wife to whom your value might suddenly multiply in case of your—er—disappearance. However," he added hastily, "I do not expect you to have any trouble."

"Thanks. When do I start?"

"Well, let's say tomorrow. Give us time for a buildup." Smullen arose. The frown wasn't quite as deep on his face. "Good luck, Stieve. You've made me feel better already. Let's hope this series will help stave off the wolves."

"Yes, sir," said Stieve. "I hope so."

But Stieve didn't feel very happy as he rode the autowalk to Timecasts. He well knew that the first man who had been sent to a prehistoric time had not come back. They hadn't sent anyone since. Safety said it was too dangerous.

Man had been too primitive in 18,000

B. C. Well—he shrugged. If it would save Smullen's neck—anyway, this would be one place where Orig Prem would not be able to stir things the wrong way.

He made an agreement with Timecasts to take the ether at eighty-two o'clock, decimal time. That would be right after dinner in New York.

He got back to his office about thirty-eight o'clock, and as he opened the door to his private office there was a clanking of steel and Orig Prem drew his chrome-plated body up to its full four feet three inches and saluted.

"Good morning, sir," he said cheerfully. "I hope you had a good night's rest, sir."

Stieve glowered at him. "I hope you didn't."

"But, sir—"

"But nothing. You see that turkey feather on the divan?"

Orig's pyrex eyes opened wide. "Yes, sir, but—"

"No turkey left it there, Prem."

Prem's eyes opened wider in what undoubtedly was the built-in expression of innocence. "But, sir—"

"That was old Chief Cook-and-Bottle-Washer, by your own christening."

A slight tinge of pink suffused Orig's steel-plated face.

"You may well blush, Prem. And I shall have more to say to you, a great deal more, about the ladies' aid and much more about Chief C-and-B-W's daughter who was promised a screen-test in Hollywood."

Orig's steel head was bowed and his eyes were downcast. "Yes, sir," he said and his metallic tones were filled with guilt.

Stieve stalked across the room to the book-shelves. "Sometimes," he said absently, "I think you forget that we represent the twenty-third century, Prem."

Orig still kept his eyes averted. "Yes, sir," he said humbly.

Stieve pulled out a book. Orig opened one eye and fixed his telescopic vision on the title.

"Are we going back to prehistoric man, sir?" he asked diffidently.

Stieve nodded. "Invention of the wheel. About eighteen thousand B.C."

"Oh fine," said Orig. His head came up straight. "That would be in the late Paleolithic or early Neolithic era."

Stieve stared. "Is that the Stone Age?"

"Yes, sir," Orig said. "In the latter part

of the Paleolithic era the Cro-Magnards in what is now southern France were pushed out by the Azilians, who began farming rather than hunting."

"Okay, but don't be so happy about it," Stieve growled. "I'm plenty sore at you, Prem."

ORIG'S enthusiasm disintegrated abruptly. "Yes, sir."

"Now, while I am figuring out what to do with Chief C-and-B-W's daughter—by the way, what's her name? No doubt you have given her a good one."

Orig licked his vanadium lips. He squirmed. "I call her Madame Du Barry," he said finally.

Stieve studied him and under the scrutiny Orig seemed to shrink. "Some day," Stieve told him, "you'll get yourself chased back into the twenty-third century with your rear side all dented up with buckshot."

"Yes, sir," said Orig penitently and, after a moment of thought, he added, "Sir, I am a most unhappy robot. I fear my conduct has not been exemplary. I have not lived up to my built-in principle—'A helpful robot is a happy robot.' Sir, I am eager to make amends."

"Okay. See Probabilities and get the exact time, then go back about a month before and check up on things. But remember—no organizing."

"But, sir, it may be necessary to organize just slightly," Orig argued. "After all, the wheel is possibly man's most important invention and it probably wasn't done in a day, sir. I shall most likely have to dramatize it slightly to make it good entertainment for your public."

"Okay." Stieve sighed. "But take it easy this time. We certainly won't need a popcorn stand."

"Of course," said Orig, "I may have to teach them a few words of English."

Stieve nodded unwillingly. "Please get started," he said.

"Yes, sir," Orig stood erect. His plates were bright and shining, his head high. "Wish me luck, sir."

"With you going first," Stieve said sourly, "I'm the one who needs luck."

Orig looked crestfallen but he turned and went out bravely, his steel heels striking the composition floor with unusual solidity. But Stieve did not relent—not immediately anyway. He would run up to Traffic later to watch Prem leave.

Right now Stieve had Smullen to worry about. Nobody knew better than Stieve how tight the situation must be for Smullen to send him back to 18,000 B.C. Ordinarily Smullen was most careful with his men.

Stieve's concern was not relieved the next day when he learned that the Legal Department had been served with a demand for one hundred thousand dollars for "uncalled-for negligence in requiring a reporter to take undue risks."

Smullen was really downcast. "A thing like this could well mean the closing of Time-Travel. It's not the amount of money asked for—which of course would be cut about ninety per cent even if Mrs. Murphy should get a judgment, because no reporter is worth a hundred thousand—it's not just that but the fact that the board gets high blood pressure every time it thinks of setting a precedent for damages in time-travel. After all, there's no telling what some screwy jury *might* do."

"All this, of course, would take on a different aspect if Time-Travel should in the meantime do something outstanding," said Stieve.

Smullen nodded. "That's the general idea."

So, at eighty o'clock, Stieve picked up a sheaf of communications from Orig Prem, took them to Medlock and got into the capsule. He gave Medlock a last warning.

"I don't care what else you do but don't turn us over to that android of yours. He's likely to get us shunted out on some time-stream that nobody could ever find again."

"I resent the slur," Medlock said with dignity, "but I will honor your request."

"Thanks." Stieve pulled the lid down. There was a coruscating whirl of lights, the sickish feeling for a moment, and then Stieve braced himself for the free fall. He floated to a stop, then the lid was thrown back and Stieve sat up, blinking his eyes.

HE GOT out cautiously, remembering that this was 18,000 B. C. He was standing on the edge of a long grassy slope. Behind him was a forest. Before him, across the meadow, was a mountainside dotted with cave mouths.

Thin smoke was coming out of one cave. Stieve started toward it. But he stopped short. In front of him stood a giant. The giant wore no shoes. His only clothing was a brown reindeer hide. His massive chest

and shoulders were matted with hair.

Stieve bent far backward to look all the way up to the giant's face. He was a Cro-Magnard all right, tall, thick like an oak tree—and glowering. He had a broad face and a big nose, and he was carrying a heavy war-club that Stieve could not have lifted off the ground.

The giant spoke in a ponderous bass voice: "What party you belong?"

Stieve controlled the impulse to run. "Party? What party?" he asked.

The giant shifted the club and watched Stieve with suspicious black eyes. "You talk too much. You repeat yourself." He picked the words slowly and carefully. "You Democrat or Republican?"

Stieve gasped. He lost his fear of the giant and began to think harsh things about Orig Prem. He'd like to lay hands on his assistant right now while he was in the mood to punish him.

Prem knew better. The Legal Department was constantly issuing warnings against involvement in politics. Now it wasn't enough for Prem that the Cro-Magnards were being succeeded by the Azilians but the little robot had to get busy and organize a whole political system.

But Stieve swallowed his anger and said, "I'm a Fence-Sitter."

The giant's eyes lighted. "Ho," he roared, "a third-party man!" He shifted the club on his shoulder and Stieve gulped.

"I suppose," Stieve said, hastily changing the subject, "that you know Mr. Orig Prem."

The giant dropped his club to the ground and the earth trembled. "I very good friend of Mr. Prem."

"Can you tell me where he is?"

The giant grinned. "Mr. Prem in forest, getting float ready for big timecast."

Stieve had a sinking feeling. "Getting the float ready?"

The giant frowned. "I repeat, you repeat yourself. You make me unhappy."

"Believe me," said Stieve earnestly, "there is nothing I would more dislike than making you unhappy. But about the timecast—when is it to take place?"

"Tonight," said the giant. "Come along. I tell you. I your guide."

Stieve felt like a pygmy following the caveman through the forest. "What's your name?" he asked.

"Davie Horsemeat. That name Mr. Prem

gave me. I eat much horsemeat," he said proudly. "That make me a big boy."

"Yes," Stieve said placatingly, "you're a very big boy. Where are we going now?"

"I take you to Mammoth City and introduce you." Davie squinted through the trees at the sun. "You have time to get something to eat, then we go over to Forestville for the timecast. Mr. Prem have a large program arranged."

"No doubt," Stieve said dryly.

They walked out into a clearing filled with stone huts. Steve listened intently to a regular *thump—plink-a-thump—thump—plink-a-thump*.

"This is Thursday afternoon," said Davie. "Our editor, Jackie Mammothtusks, getting off first run of *Cro-Magnon Chronicle*. Mr. Mammothtusks says the press a relic but the damn thing prints."

Stieve sucked in his breath. One thing had always been understood between Prem and him. Prem would not teach any natives to use English swear words.

"Anyhow," went on Davie Horsemeat, "equipment very hard to get these days."

"Equipment always has been hard to get—out of the Smithsonian Museum," Stieve said dryly.

"Mr. Mammothtusks is going to play a leading part in the enactment tonight."

Stieve drew a deep breath. "What time is the timecast?"

"Eight o'clock, soon as Queen of the Wheel returns from good will trip to next mountain."

STIEVE groaned. "Queen of the Wheel, eh?"

"Oh, yes, Mr. Prem say everything very modern and sophisticated. He say Miss Wheel Queen most beautiful girl in Mammoth City. She my daughter," Davie said proudly.

Stieve looked shrewd. "Did Mr. Prem possibly mention a screen test?"

"I believe he did," Davie said thoughtfully. "He said winner of queen contest always eligible for Hollywood."

Stieve groaned. "If somebody doesn't dull that robot's organizing principle we'll have all the time streams jammed up for ten thousand years." He looked at his watch. "Well, it's a couple of hours yet and no doubt by this time Prem is handling the good will tour. Let's dispose of the eating now."

"Sure. I take you."

A big neon sign said, "Neolithic Cafe. Aged Mammoth Steaks a Specialty." And underneath, in small italic letters, it said, "Endorsed by Orig Prem."

Stieve snorted. "That endorsement doesn't mean a thing. Orig Prem doesn't know anything about food. He can't eat."

"He said it would attract tourists," said Davie doubtfully.

They went inside. "I'll buy your dinner," said Stieve. "It goes on the expense account anyway."

Davie Horsemeat looked genuinely regretful. "Sorry, Mr. Stievandro. I have to get the stage ready for the timecast. I see you later, hey? Just follow the path to Forestville. Only two miles."

"Sure." Stieve sat on a stone bench.

The waitress was almost as big as Davie. She handed Stieve a menu that read, "Barbecued reindeer, bison roast, auroch cutlets, wild horse tenderloin, fried caterpillars."

Those items did not excite Stieve's salivary glands. "How about a nice bowl of potato salad?" he asked. "And toast and coffee."

"Sorry, Mister," the giantess said. "No potato salad today. We don't have potatoes yet. Potatoes still in America. But I fix you nice acorn relish."

"I'll try it," Stieve said, hoping.

The acorn relish wasn't bad but a little difficult to eat without silverware. There was about a peck of it and when Stieve got halfway through he sat back with a big sigh. He wiped his fingers on his handkerchief and looked up to see the waitress at his side.

"How much is it?"

"Forty dollars," she said cheerfully.

Stieve blinked. "I'll sign the check," he said.

"No," she said. "That cash price."

Stieve frowned. "Let's be reasonable. I haven't that much money and you know it. By the way, who set those prices, anyway?"

"Those tourist prices suggested by Mr. Prem. He says tourists feel gyped if they not gyped."

Stieve eyed her speculatively. "What if I can't pay?"

"You pay, all right. My father Davie Horsemeat."

"Ugh." For the first time Stieve was really uncomfortable. "Look, don't I get a dessert?"

"I bring you nice dish of wild cherries and yewberries." She left.

So did Stieve. He left rather hurriedly. Something told him not to cross Miss Horsemeat—at least not within her reach. He scooted across the small clearing, past the thumping cylinder press in the office of the *Chronicle* and down the trail to Forestville.

This second town was larger and it was now filled with people in a holiday mood. On every corner was a small caveboy selling helium balloons—"The latest scientific toy"—and each one was imprinted with the words "Orig Prem, Licensee."

Stieve grumbled. He worked his way through the crowd toward the center of town, and had just come within sight of a log structure which he recognized as the timecast booth, like a small bandstand in the middle of a street, when he heard yells.

A WAGON drawn by four reindeer covered with leaves and flowers came into sight at the other end of the street. On a skin-covered dais in the center of the wagon, under a great papier maché wheel which turned slowly, with each spoke throwing a different color of light, stood Miss Cro-Magnard—or, rather, Miss Horsemeat.

She wasn't as rugged as her sister in the restaurant. She was young and curvy and her complexion was a soft suntan. She should have been Miss Whistlestop.

As Stieve thought of that, he whistled. She turned a dizzying smile upon him.

Then Stieve's eyes narrowed. There was Prem, sitting at Miss Wheel Queen's feet, as smug and cocky as a four-foot three-inch robot could be.

Stieve watched the float go by and then he stared. This float had wheels. But a small sign on the back reassured him—"Pardon us. Wheels not invented yet but used on this wagon by special dispensation of Orig Prem."

Stieve's jaws hardened. Who was Prem anyway to be issuing dispensations like that? He'd have a talk with Prem.

He followed the float. There was much cheering, with hairy giants tossing their clubs into the air indiscriminately, and Stieve watched pretty carefully to avoid being beneath one of those clubs on the way down.

He realized there were some boos mixed with the cheering. Then unexpectedly Orig Prem was at his elbow. "Welcome, sir. I saw you in the crowd." Orig was most cheerful.

"Okay," Stieve said gruffly. "But why

did you have to organize political parties for this affair? Don't you know this is an election year in twenty-two thirty-two? Isn't that enough for you?"

Prem looked contrite. "But, sir, I could not arouse any enthusiasm for this timecast until I announced an election for a queen. Then and only then, sir, I gave the two parties names. Innocently, sir. Cross my heart—pardon me, I mean my electrostatic amplifier."

"Listen to those boos. It sounds to me as if you've let your realism go further than mere names."

"Oh," said Prem easily, "everything is under control, sir. Pardon me, here we are at the timecasting stand, sir. I'll help you up."

Stieve began to feel nervous. He wondered if the Democrats, or Azilians, had had a candidate. And if so, how had the Cro-Magnards won the election? Weren't they supposed to be decreasing in numbers now?

Orig was making an announcement into the microphone. Stieve looked around the booth. He recognized the big-boned Cro-Magnards on one side and he assumed the smaller, darker men on the other side were the Azilians.

A great reindeer-skinned caveman stepped to the microphone and, at a nod from Prem, the Cro-Magnard began to speak.

"Ladies, gentlemen. Pardon me, ladies do not have suffrage yet. Gentlemen. We here for great celebration, invention of the wheel. Man's most significant event. Without wheel future generations would not have can-openers, baby-buggies, or steam-rollers. Cro-Magnards very proud to have invented wheel."

He bowed. The Cro-Magnards cheered while the Azilians maintained a stony silence. Stieve began to feel strangely uncomfortable.

Then an Azilian addressed the microphone. "We happy to be here on this glorious occasion. We remind our Cro-Magnon brothers that invention of the wheel was decided by ballot, not by facts. We remind listeners that history shows we shall succeed Cro-Magnards. We suggest listeners think very solemnly before trying to change course of history."

He sat down. There were cheers from the Azilians. The Cro-Magnards were not silent. They booed.

"Sounds like a baseball game in Brooklyn," Stieve observed to Prem.

"Oh, don't mind, sir." Prem's metallic voice was reassuring but Stieve thought there was a gleam of uncertainty in Prem's pyrex eyes.

A Cro-Magnard got up and went to the microphone.

"Hey, what is this?" asked Stieve, "a marathon?"

"Sir," Orig Prem said earnestly, "I had to promise them a chance to talk to get them here to furnish color for the timecast."

A spot was clearing in front of the stand. In the center was the giant Davie Horsemeat, leaning on his club. Orig turned the klieg-lights on Davie, signaled Distribution up in 2232 and spoke into the microphone.

"Now, ladies and gentlemen of the twenty-third century, you are about to witness the most historic incident in the history of mankind—the invention of the wheel, in the year eighteen thousand fifteen B. C. The wheel is man's only true invention. All others of man's so-called inventions are actually adaptations but the one thing Nature did not invent is the wheel."

THE crowd cheered.

"I may say that the decision as to who actually invented the wheel was the subject of a friendly rivalry between the Azilians and the Cro-Magnards, the former claiming it was invented to move their crops, the latter holding it was first used to transport meat to camp after the kill.

"The argument was settled by an election in which the Cro-Magnards were victorious by two cracked heads—pardon me, by a slight margin." Prem coughed discreetly. "You will now see a reconstructed on-the-spot dramatization of man's greatest invention."

Davie Horsemeat disappeared in the trees. A moment later a bison came out, grazing. Davie felled it with a club, and stood for a moment licking his lips, his eyes big and white in their sockets.

Orig nudged Stieve. "Good actor, isn't he?"

Stieve frowned. "I hope he doesn't take a bite out of that bison's withers."

But Davie remembered his lines. He tried to put the bison on his great shoulders but it was too heavy. He dropped it after a struggle and stood there wiping the sweat from his massive brow. Then he leaned against the carcass. It moved!

He studied it, wrinkling his brow. He

pushed it. It moved again. He looked underneath and discovered a big rock under the bison, a round rock that rolled.

"And that," said Orig Prem at the microphone, "is the first step in the invention of the wheel. Act Two follows."

The clearing was dark for a moment, then the lights came on and Davie Horsemeat, assisted by another giant who, Stieve assumed, was Jackie Mammothtusks, pushed a big canoe out into the clearing on short pieces of log.

Then the two loaded the fallen bison into the canoe and pushed it on out of the clearing, Davie pushing, Jackie Mammothtusks snatching up the logs as they dropped out behind and running around in front to lay them under the canoe again.

A great cheer went up from one side of the crowd but Stieve noticed that the other side was silent. Prem was saying, "That, in brief, ladies and gentlemen of twenty-two thirty-two, shows the first two steps. Mr. Horsemeat and Mr. Mammothtusks will now appear in the final climactic scene."

The spotlight shifted to one edge of the clearing. Davie Horsemeat came pushing a large-sized log with a small hollow through the center.

Stieve heard an Azilian say into the microphone, "—the two biggest hams before Shakespeare."

A great cloud of helium-filled balloons with rocks tied to their strings traversed short arcs into the clearing and settled down around Davie, to the accompaniment of a chorus of boos from the Azilians.

Clubs had been flying in the air from the Cro-Magnards but suddenly the clubs began to change direction. Instead of going straight up they hurtled at the Azilians. The Azilians sent back some flint-tipped arrows. A Cro-Magnard fell. Then the Cro-Magnards rushed in a body toward the Azilians.

Stieve began to see how the Cro-Magnards had won the election. In a moment the two halves of the crowd were battling furiously. The timecast stand was emptied as speakers of both sides leaped joyfully into the fight. The battlers swayed against the stand and it shivered. It was only boughs tied together with vines, anyway. The nail had not been invented.

Stieve began to look for a way out. Then a head appeared above the floor of the stand and a Cro-Magnard vaulted up. Stieve retreated.

"You no pay for your dinner," the Cro-Magnard said ominously, "and you no leave tip. You come now and wash dishes for me."

Stieve stared at the ponderous arm reaching for him, then at the Cro-Magnard's face, and recognized Miss Horsemeat. He side-stepped and looked wildly for Orig Prem. The little robot was not in sight. Stieve ducked Miss Horsemeat's clutching fingers and dived for an opening in the crowd.

He slid halfway across the floor on his stomach just as Davie Horsemeat vaulted up over the edge of the platform. Stieve catapulted into Davie's big legs. Davie grunted and sat down on Stieve. Stieve gasped.

When he could get his breath he said, "This, my friend, is definitely a horse on me."

Davie was grinning broadly from ear to ear. "How I do? You think I get a contract on Broadway? Huh?"

Stieve looked at him from under lowered eyelids. "Sure," he said without batting an eyelash, "I'm looking for an agent now."

DAVIE jumped up. He took Stieve under his arm like a haunch of venison and waded through the mob. He let Stieve down when they were safe.

Stieve started to thank him but he heard yells. They were pursued. Davie turned to battle. Stieve turned to run. He sprinted back through Mammoth City, down the trail again, and vaulted into the time-capsule and thankfully pulled down the lid. He was sorry for Davie but he thought the big Cro-Magnard could take care of himself.

He was still breathing hard when Medlock pulled back the lid and brought the step.

"How was it?" asked Medlock.

"Unbelievable!" Stieve gritted. "Where's Prem?"

Medlock suppressed a sly smile. "He's around somewhere."

Stieve took the fast walk to his suite. A message was there from Smullen. "Time-cast from eighteen thousand B. C. best feature in years. The fight scene wonderful. Very realistic. Still coming in. Congratulations. You have saved our necks. Smullen."

Stieve tossed it aside. He was too angry even to gloat. He started to stamp out, but came face to face with Orig Prem. Behind Prem was Murphy, who had disappeared two months ago. "Hi, Stieve," said Murph.

Stieve swallowed. "Hi, Murph."

"So?" Stieve said to Orig in a cold voice.

The robot nodded hastily. "I just happened to think—Murphy got lost at the same time Medlock was watching the construction of the Mayan pyramids. I looked up the records. Murphy's trip was handled by Medlock's android and I, knowing that anything might happen with an android—begging your pardon, sir," he said to Murphy, "I forgot you're an android man." He addressed Stieve again.

"Anyway, the android sent Murph to the Mayan pyramids instead of to Samarkand. I went back to look and found him. 'A helpful robot is a happy robot,' you know," he said brightly.

"You're wiggling out fast," said Stieve, "but how about Madame du Barry's screen test? How are you going to swing that?"

Orig thoughtfully hesitated. "Well—"

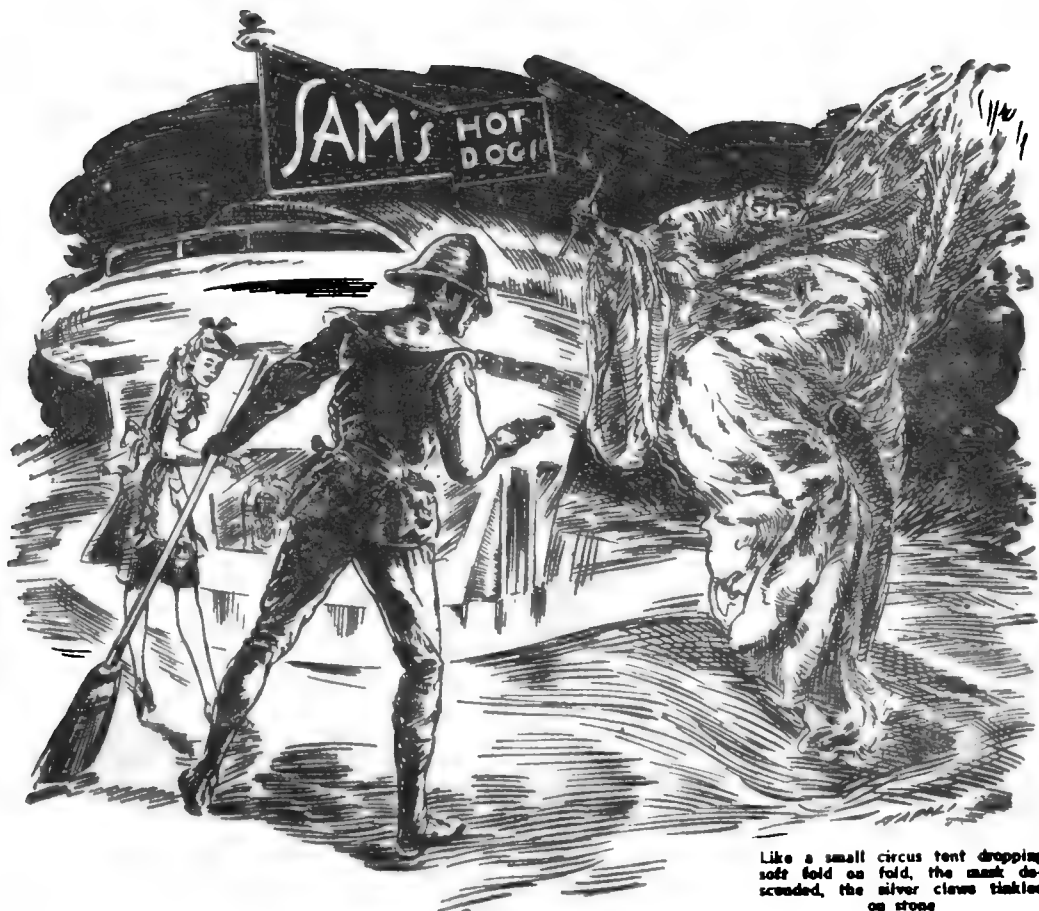
"Message for you, sir," said a half-size robot copy-boy.

"Thanks." Stieve opened the envelope and read the message. Then he looked up. "Listen to this: 'Jupiter renewed full Tele-paper coverage. Probabilities advises they misplaced a decimal point. It should have been eighteen thousand B. C.' " Stieve groaned.

"But never mind. Authorities don't agree. It was a good show anyway. Hollywood in nineteen forty-eight has just made an offer for exclusive rights to the riot scene in eighteen thousand B. C. What do you suggest? Smullen.' Well," Stieve drew a deep breath, "that takes care of Madame du Barry." But he was sarcastic when he added, "We'll make them take her along with the fight."

Orig Prem was squirming now with happiness.

"I'll do it this time." Stieve said reluctantly to the robot. "I'll help you out on Madame du Barry but never again. And one more thing"—he fixed an eagle eye on Orig Prem—"where's my cut on your lecture fees from the ladies' aid?"



Like a small circus tent dropping soft fold on fold, the mask descended, the silver claws tinkled on stone

The Off Season

By RAY BRADBURY

"R-r-red hot! R-r-red hot! Get your franks now! Your only chance on Mars—"

SAM PARKHILL motioned with the broom in his big hands and gazed off at the blue Martian hills.

"Here we are," he said. "Yes, sir, look at that!" He pointed. "Look at that sign: 'SAM'S HOT DOGS!' Ain't that beautiful, Anna, I mean now, ain't it?"

"Sure, Sam," said his wife.

"Can you honestly say I'm not smart, I mean honest?" he asked. "My initial invest-

ment—peanuts. My overhead—beans. We'll swim in gravy, Anna, gravy!"

His wife looked at him for a long time, not speaking.

This was a crossroads where two dead metal highways came and went in darkness from one deserted city to another. Here Sam had flung up this new riveted aluminum structure, garish with blazing light, trembling with juke-box melody.

He walked around and around, blinking at it, hands on hips, smiling. He stooped to fix a border of broken glass he had placed on the footpath. He had broken this glass from some old windows of buildings in the dead Martian towns for this purpose. He laughed all the time.

"The best hot dogs on two worlds! The first man on Mars with a hot dog stand! My dream! The best onions and chili and mustard! Can't say I'm not alert. Here's the main highways, over there is the dead city and the mineral deposits. Those trucks from the new Earth settlement will have to pass here twenty-four hours a day! Do I know my locations, or don't I?"

His wife looked at her fingernails.

"You think those ten thousand work rockets will come through to Mars?" she said at last.

"In a month," he said loudly. "Why you look so funny?"

"I don't trust those Earth people," she said. "I'll believe it when I see them ten thousand rockets arrive with our one hundred thousand workers and scientists and all."

"Customers." He lingered on the word. "One hundred thousand hungry people."

"If," said his wife, slowly, watching the sky, "there's no atomic war. I don't trust no atom bombs. There's so many of them on Earth now, you never can tell."

"Ah," said Sam, and went on sweeping.

A wind whispered across the counters. Somebody floated gently on the air.

A mask.

"So you're back again!" cried Sam, holding onto his broom.

THE mask, cut from pale blue glass, floated in the wind. Under it were blowing robes of thin yellow silk. From the silk two mesh-silver hands were outstretched. The mouth of the mask was a curved slot from which a faint musical sound issued now as the robes, the mask, the hands increased to a height, decreased.

"Mr. Parkhill, I return to speak with you further," the voice said from behind the mask.

"Every day, every day, dang it!" cried Sam. "Clear out, I don't want you here! You wait until I'm all built and then come and claim this is your land!"

"I come for a different reason this time," said the blue mask.

"Look here!" said Sam. "I'm Sam Parkhill, I'm from New York City, and where I come from there's two billion others just like me. And you Martians, you're just a couple dozen left, all the rest of you dead. You got no cities, you just wander around in the ruins, you got no leaders, no laws, and now you come tell me that this is your land! Well, you're ten thousand years late! The old got to give way to the new. That's the law of change—give and take! There's only a thousand us Earthmen on Mars tonight, but that's ten times as many as you guys, so just float away and let me be!"

"We Martians are telepathic," said the cold blue mask. "We are in constant invisible contact with Earth and tonight we have news to bring you concerning Earth."

A silver hand gestured. A bronze tube appeared in it.

"Let me show you this."

"A gun!" cried Sam Parkhill.

An instant later he had yanked his own gun from his hip holster and fired into the mist, the robe, the blue mask.

The mask sustained itself a moment. Then, like a small circus tent pulling up its stakes and dropping soft fold on fold, the silks rustled, the mask descended, the silver claws tinkled on the stone path. The mask lay on a small huddle of silent white bones and material.

Sam stood gasping.

His wife swayed over the huddled pile.

"That's no weapon," she said, bending down. She picked up the bronze tube. "He was going to show you a message. It's all written out in snake-script, all the blue snakes. I can't read it. Can you?"

"No, that Martian picture writing, it wasn't anything. Let it go!" Sam glanced hastily around. "There may be others! We've got to get him out of sight. Get the shovel!"

"What're you going to do?"

"Bury him, of course!"

"You shouldn't have shot him."

"It was a mistake. Quick!"

Silently, she fetched him the shovel.

At eight o'clock he was back sweeping the front of the hot dog stand self-consciously. His wife stood, arms folded, in the bright doorway.

"I'm sorry what happened," he said. He looked at her, then away. "You know it was purely the circumstances of Fate."

"Yes," said his wife.

"I hated like heck to see him take out that weapon."

"What weapon?"

"Well, I thought it was one! I'm sorry, I'm sorry! How many times do I say it!"

"Ssh," said Anna, putting one finger to her lips. "Ssh."

"I don't care," he said. "I got the whole Rocket Corporation back of me!" He snorted. "These Martians won't dare do anything, if they know what's good for them!"

"Look," said Anna.

He looked out onto the dead sea bottom. He dropped his broom. He picked it up and his mouth was open, a little free drop of saliva flew on the air, and he was suddenly shivering.

"Anna, Anna, Anna!" he said.

"Here they come," said Anna.

Across the dead sea bottom a number of tall blue-sailed Martian sand-ships floated, like blue ghosts, like blue smoke.

"Anna!" Sam ran first one direction, then another, and stopped. "Come on, let's get out of here!"

"Why?" she asked, slowly, fascinated with the Martian vessels.

"They'll kill me! Get in our sand-ship, quick!"

Anna didn't move.

SAM had to drag her around back of the stand, in a dull lump, to where their sand-ship stood waiting. He thrust her in, jumped in behind her and flapped the tiller, let the sail up to take the evening wind.

The stars were bright and the blue Martian ships were skimming across the whispering sands. His blood pumped, making him sick. At first the ship would not go, then he remembered the sand-anchor and cast off.

"There!"

The wind hurled the sand-ship keening over the dead sea bottom, over long buried crystals, past upended pillars, past deserted docks of marble and brass, past dead white chess cities, past purple foothills, into distance. The figures of the Martian ships receded, and then began to pace Sam's ship.

"Guess I showed them, by glory!" cried Sam. "I'll report to the Rocket Corporation. They'll give me protection! I'm pretty quick."

"They could have stopped you if they wanted," Anna said tiredly. "They just

didn't bother."

He laughed. "Come off it. Why should they let me get off? No, they weren't quick enough, is all."

"Weren't they?" Anna nodded behind him.

He did not turn. He felt a cold wind blowing. He was afraid to turn. He felt someone in the seat behind him, something as frail as your breath on a cold morning, something as blue as hickory wood smoke at twilight, something like old white lace, something like a snowfall, something like the icy rime of winter on the brittle sedge.

There was a sound as of a thin plate of glass broken—laughter. Then silence. He turned.

The young woman sat the tiller bench quietly. Her wrists were thin as icicles, her eyes as clear as the moons and as large, steady and white. The wind blew at her and, like an image on cold water, she rippled, silk standing out from her frail body in tatters of blue rain.

"Go back," she said.

"No." Sam was quivering, the fine delicate fear-quivering of a hornet suspended in the air, undecided between fear and hate. "Get off my ship!"

"This isn't your ship," said the vision. "It's old as our world. It sailed the sand seas ten thousand years ago when the seas were whispered away and the docks were empty, and you came and took it, stole it. Now, turn it around, go back to the cross-roads place. We have need to talk with you. Something important has happened."

"Get off my ship!" said Sam. He took a gun from his holster with a creak of leather. He pointed it carefully. "Jump off before I count three or—"

"Don't!" cried the girl. "I won't hurt you. Neither will the others. We came in peace!"

"One," said Sam.

"Sam!" said Anna.

"Listen to me," said the girl.

"Two," said Sam, firmly, cocking the gun trigger.

"Sam!" cried Anna.

"Three," said Sam.

"We only—" said the girl.

The gun went off.

In the sunlight, snow melts, crystals evaporate into a steam, into nothing. In the firelight vapors dance and vanish. In the core of a volcano, fragile things burst and

disappear. The girl, in the gunfire, in the heat, in the concussion, folded like a soft scarf, melted like a crystal figurine. What was left of her, ice, snow-flake, smoke, blew away in the wind. The tiller seat was empty.

Sam holstered his gun and did not look at his wife.

"Sam," she said, after a minute more of traveling, whispering over the moon-colored sea of sand, "stop the ship."

"Why?"

"I want to get out," she said. "I don't want to be anywhere near you any more. Stop the ship."

He looked at her and his face boned tight. "No, you don't. Not after all this time, no you don't. You're not pulling out on me. You're going right with me all the way."

She looked at his hand on his gun. "I believe you would," she said, her eyes fixed on the gun. "I believe you actually would."

He jerked his head from side to side, eyes closed, hand tight on the tiller.

"Anna, Anna, this is crazy. I wouldn't hurt you. We'll be in the town in a few minutes, then we'll be okay!"

"Yes," said his wife, lying back cold in the ship.

"Anna, listen to me."

"There's nothing to hear, Sam," she said. "But the wind."

"Anna!"

THEY were passing a little white chess city, and in his frustration, in his rage, he pulled out his gun and sent six bullets crashing among the crystal pillars of the city. The city dissolved in a shower of ancient glass and splintered quartz. It fell away like carved soap, shattered. It was no more. He laughed and fired again and one last tower, one last chess piece, took fire, ignited, and in blue flinders, went up to the stars.

"I'll show them!" he cried. "I'll show everybody."

"Go ahead, show us, Sam," murmured his wife, lost in shadow.

"Here comes another city!" shouted Sam, reloading his gun. "Watch me fix it!"

The blue phantom ships came out of the distance behind and drew steadily apace. He did not see them at first. He was only aware of a whistling and a high windy

screaming, as of steel on sand, and it was the sound of the sharp razor prows of the sand-ships preening the sea bottoms, their red pennants, blue pennants unfurled. In the blue light ships were blue dark images, masked men, men with silvery faces, men with blue stars for eyes, men with carved golden ears, men with tinfoil cheeks and ruby-studded lips, men with arms folded, men following him, Martian men.

One, two, three. Sam counted. The Martian ships closed in.

"Anna, Anna, I can't hold them all off!"

Anna did not speak or rise from where she had slumped.

Sam fired his gun, eight times. One of the sand ships fell apart, the sail, the emerald body, the bronze hull points, the moon-white tiller, and all the separate images in it. The masked men, all of them, dug into the sand and separated out into orange and then smoke-flame.

But the other ships closed in.

"I'm outnumbered, Anna!" he cried. "They'll kill me!"

He threw out the anchor. It was no use. The sail fluttered down, folding unto itself, sighing. The ship stopped. The wind stopped. Travel stopped. Mars stood still as the majestic vessels of the Martian drew around and hesitated over him.

"Earth man," a voice called from a high seat somewhere. A silverine mask moved. Ruby-rimmed lips glittered with the words.

"I didn't do anything!" Sam looked at all the faces, one hundred in all, that surrounded him. There weren't many Martians left on Mars—one hundred, one hundred and fifty, all told. And most of them were here now, on the dead seas, in their resurrected ships, by their dead chess cities, one of which had just fallen like some fragile vase hit by a pebble. The silverine masks glinted.

"It was all a mistake," he pleaded, standing out of his ship, his wife slumped behind him in the deeps of the hold, like a dead woman. "I came to Mars like any honest enterprising businessman. I took some surplus material from a rocket that crashed and I built me the finest little stand you ever saw right there on that land by the crossroads—you know where it is. You've got to admit it's a good job of building." Sam laughed, staring around. "And that Martian—I know he was a friend of yours—came. His death was an accident. I assure you. All I

wanted to do was have a hot dog stand, the only one on Mars, the first and most important one. You understand how it is? I was going to serve the best darned hot dogs there, with chili, and onions and orange juice."

The silver masks did not move. They burned in the moonlight. Yellow eyes shone upon Sam. He felt his stomach clench in, wither, become a rock. He threw his gun in the sand.

"I give up."

"Pick up your gun," said the Martians, in chorus.

"What?"

"Your gun." A jeweled hand waved from the prow of a blue ship. "Pick it up. Put it away."

Unbelieving, he picked up the gun.

"Now," said the voice, "turn your ship and go back to your stand."

"Now?"

"Now," said the voice. "We will not harm you. You ran away before we were able to explain. Come."

NOW the great ships turned as lightly as moon thistles. Their wing-sails flapped with a sound of soft applause on the air. The masks were coruscating, turning, firing the shadows.

"Anna!" Sam tumbled into the ship. "Get up, Anna. We're going back." He was excited. He almost gibbered with relief. "They aren't going to hurt me, kill me, Anna. Get up, honey, get up."

"What—what?" Anna blinked around and slowly, as the ship was sent into the wind again, she helped herself as in a dream, back up to a seat and slumped there, like a sack of stones, saying no more.

The sand slid under the ship. In half an hour they were back at the crossroads, the ships planted, all of them out of the ships.

The Leader stood before Sam and Anna, his mask beaten of polished bronze, the eyes only empty slits of endless blue-black, the mouth a slot out of which words drifted into the wind.

"Ready your stand," said the voice. A diamond-gloved hand waved. "Prepare the viands, prepare the foods, prepare the strange wines, for tonight is indeed a great night!"

"You mean," said Sam, "you'll let me stay on here?"

"Yes."

"You're not mad at me?"

The mask was rigid and carved and cold and sightless.

"Prepare your place of food," said the voice softly. "And take this."

"What is it?"

Sam blinked at the silver foil scroll that was handed him, upon which, in heiroglyph, snake figures danced.

"It is the land grant to all of the territory from the silver mountains to the blue hills, from the dead salt sea there, to the distant valleys of moonstone and emerald," said the Leader.

"M-mine?" bleated Sam, incredulous.

"Yours."

"One hundred thousand miles of territory?"

"Yours."

"Did you hear that, Anna?"

Anna was sitting on the ground, leaning against the aluminum hot dog stand, eyes shut.

"But why, why—why are you giving me all this?" asked Sam, trying to look into the metal slots of the eyes.

"That is not all. Here." Six other scrolls were produced. The names were declared, the territories announced.

"Why, that's half of Mars! I own half of Mars!" Sam rattled the scrolls in his fists. He shook them at Anna, insane with laughing. "Anna, did you hear?"

"I heard," said Anna, looking at the sky.

She seemed to be watching for something. She was getting a little more alert now.

"Thank you, oh thank you," said Sam, to the bronze mask.

"Tonight is the night," said the mask.

"You must be ready."

"I will be. What is it—a surprise? Are the rockets coming through earlier than we thought, a month earlier from Earth? All ten thousand rockets, bringing the settlers, the miners, the workers and their wives, all hundred thousand of them? Won't that be swell, Anna? You see, I told you. I told you, that town there won't always have just one thousand people in it. There'll be fifty thousand more coming, and the month after that a hundred thousand more and by the end of the year five million Earth men. And me with the only hot dog stand staked out on the busiest highway to the mines!"

The mask floated on the wind. "We leave you. Prepare. The land is yours."

In the blowing moonlight, like metal

petals of some ancient flower, like blue plumes, like cobalt butterflies immense and quiet, the old ships turned and moved over the shifting sands, the masks beaming and glittering, until the last shine, the last blue color, was lost among the hills.

"Anna, why did they do it? Why didn't they kill me? Don't they know anything? What's wrong with them? Anna, do you understand?" He shook her shoulder. "I own half of Mars!"

She watched the night sky, waiting.

"Come on," he said. "We've got to get the place fixed. All the hot dogs boiling, the buns warm, the chili cooking, the onions peeled and diced, the relish laid out, the napkins in the clips, the place spotless! Hey!" He did a little wild dance, kicking his heels. "Oh, boy, I'm happy, yes, sir I'm happy," he sang, off-key. "This is my lucky day!"

HE BOILED the hot dogs, cut the buns, sliced the onions in a frenzy.

"Just think, that Martian said, a surprise. That can only mean one thing, Anna. Those hundred thousand people coming in ahead of schedule, tonight, of all nights! We'll be flooded! We'll work long hours for days, what with tourists riding around seeing things, Anna. Think of the money!"

He went out and looked at the sky. He didn't see anything.

"In a minute maybe," he said, snuffing the cool air gratefully, arms up, beating his chest. "Ah!"

Anna said nothing. She peeled potatoes for French fries quietly, her eyes always on the sky.

"Sam," she said, half an hour later. "There it is. Look."

He looked and saw it.

Earth.

It rose full and green, like a fine-cut stone, above the hills.

"Good old Earth," he whispered, lovingly. "Good old wonderful Earth. Send me your hungry and your starved. Something, something—how does that poem go? Send me your hungry, old Earth. Here's Sam Parkhill, his hot dogs all boiled, his chili cooking, everything neat as a pin. Come on, you Earth, send me your rockets!"

He went out to look at his place. There it sat, perfect as a fresh-laid egg on the dead sea bottom, the only nucleus of light and warmth in hundreds of miles of lonely wasteland. It was like a heart beating alone in a great dark body. He felt almost sorrowful with pride gazing at it with wet eyes.

"It sure makes you humble," he said, among the cooking odors of wieners, warm buns, rich butter. "Step up," he invited the various stars in the sky. "We'll be the first to buy?"

"Sam," said Anna.

Earth changed in the black sky.

It blew up.

It came apart in ten billion sections, as if a gigantic jigsaw had exploded. It burned with an unholy dripping glare, like a torch in a wet banquet hall at midnight.

"What was that?" Sam looked at the green flame in the sky.

"Earth," said Anna, holding her hands together.

"That *can't* be Earth, that's not Earth! No, that ain't Earth! It can't be!"

"You mean it couldn't be Earth," said Anna, looking at him. "That just isn't Earth, no that's not earth, is that what you mean?"

"Not Earth—oh no, it couldn't be," he wailed.

He stood there, his hands at his sides, his mouth open, his eyes wide and staring, not moving.

"Sam." She called his name. For the first time in days her eyes were on fire. "Sam," she called.

He looked up at the sky.

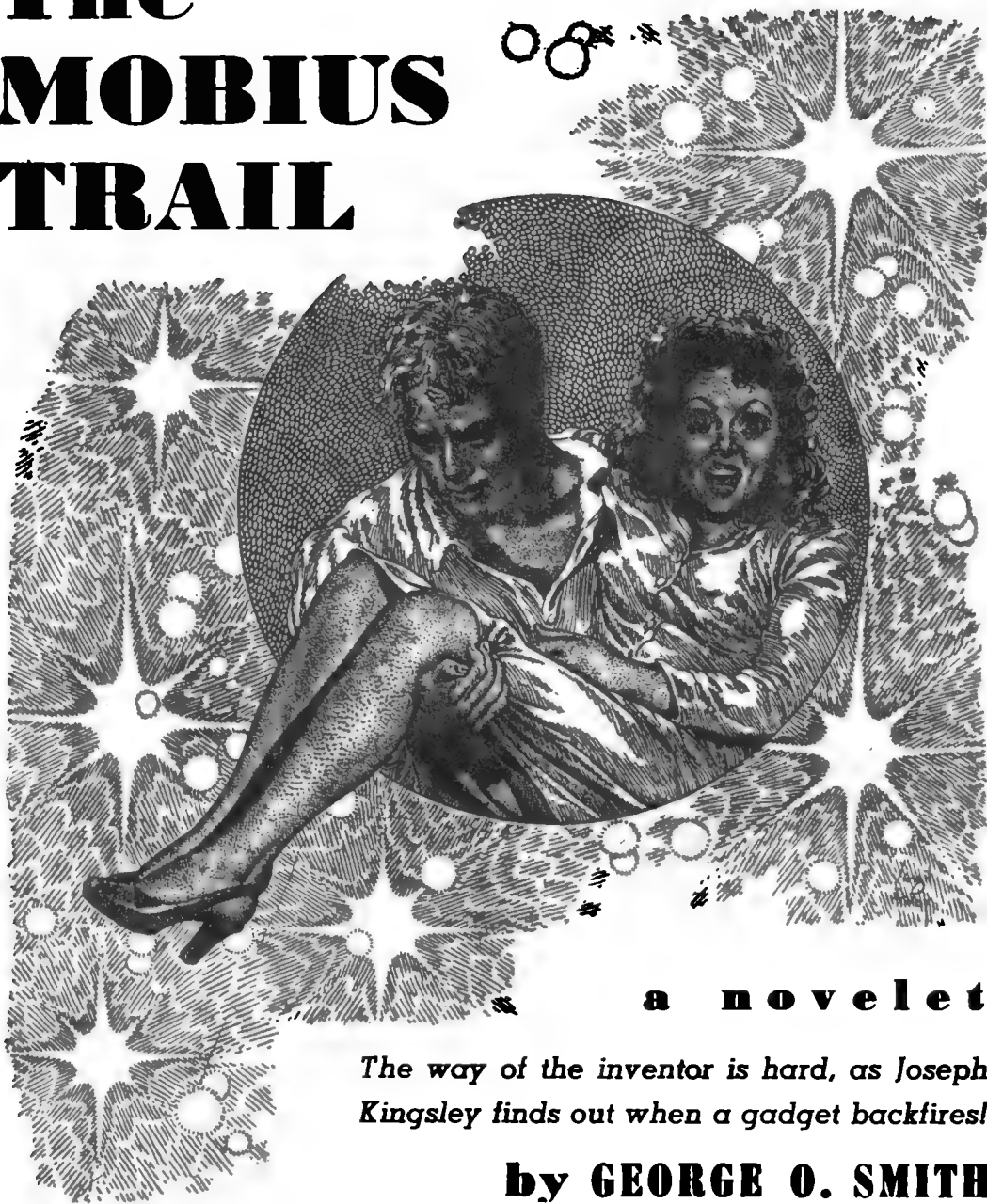
"Well," she said. She looked around for a minute or so, in silence. Then, briskly, she flapped a wet towel over her arm. "Switch on more lights, turn up the music, open the doors. There'll be another batch of customers along in about a million years. Gotta be ready, yes, sir."

Sam did not move.

"What a swell spot for a hot dog stand," she said. She reached over and picked a toothpick out of a jar and put it between her front teeth. "Let you in on a little secret, Sam," she whispered, leaning toward him. "This looks like it's going to be an off-season."

AGAINST THE FALL OF NIGHT, a Novel of the Future by ARTHUR C. CLARKE, in the November STARTLING STORIES—
Now on Sale, 25c at All Stands!

The MOBIUS TRAIL



a novelet

The way of the inventor is hard, as Joseph Kingsley finds out when a gadget backfires!

by GEORGE O. SMITH

CHAPTER I *Fantastic Fact*

THE FIRST model of any invention is never the refined version. More than likely it is a rather sorry mess, con-

taining converted parts and hand-whittled members; strewn profusely with regard only to their function, and without a single thought for the esthetic quality of placement or shining panel and meter.

Grown from a single idea, passed through

Boon or Blight—What Would be the Future

the adolescent growing pains of many failures and few true advances, the finished product is an inefficient, ill-appearing semi-mediocre forerunner of the final thing. The first working model may also make its first success at some odd hour in the morning after a job of work that culminates forty or fifty solid hours—after a few years of preliminary planning and building.

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The plate was ringed by equipment of one sort or another, but Kingsley was interested only in the plate. Not the mirror image of his own face behind the plate, but in the surface of the plate itself.



In the dimness, Blair could see Sally

And so Joseph Kingsley yawned as he stepped back. He was waiting for the tubes to come up to working temperature. For the past twelve hours it had been just another half-hour, perhaps, and then a final bit of frustration before the trial. Kingsley refused to give up and go to bed, because success was so close.

His reward was near, now. He watched the meters indolently, smoked a cigarette until everything came to stable operating

Subtly it changed from a solid shining surface to a translucent film, and then it faded into a partially transparent darkness. Kingsley took a deep breath and realized that he had been holding his breath for a full minute. He shook his head quizzically and poked a pencil forward.

THE culmination of months of work depended upon this moment. According to all of the laws of modern physics, the pencil

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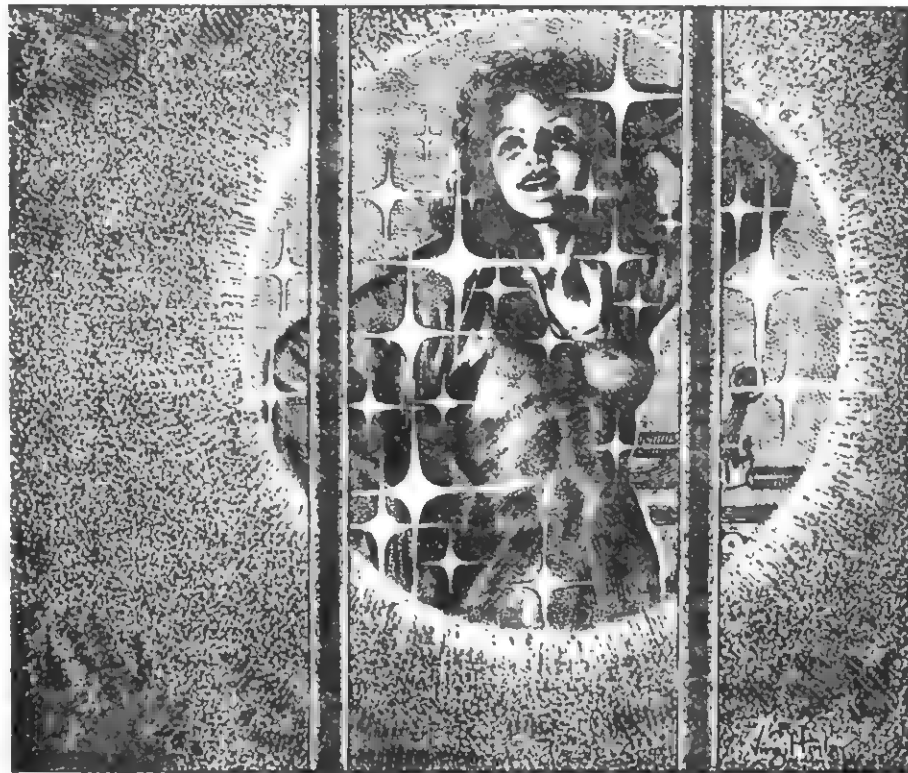
should have come against the silver plate regardless of its change in color. It was not supposed to stop, yet Kingsley really did not believe that the pencil would do anything else even though he had designed the gear after making the preliminary discoveries. It was so utterly fantastic that he himself did not really believe it.

Gingerly he pushed the pencil forward and

side—there was no light. Or not much, anyway, compared to the high level of light in his laboratory.

Joseph Kingsley withdrew the pencil and inspected it. It had not changed.

He looked through the plate. It reminded Joe of peering through a three-inch porthole from a brightly lighted room into a dimly lighted space, or perhaps looking out of his



Framed by a circle of light

then he knew that the point of the pencil was beyond the surface of the silver plate. The plate was invisible, now, but in the three-inch expanse, Kingsley could estimate the virtual surface reasonably close. He shoved the pencil in deep; stopping only when his fingers were close to the invisible surface.

He looked at the pencil. It seemed normal enough. It was illuminated by the light in his room passing through the three-inch circle made by the silver plate. On the—other

room onto the street through a three-inch hole in the wall. A street darkened by night. He could see nothing because the light in the room was too bright.

He shoved a forefinger into the circle with a cautious gesture. It might hurt; it might be dangerous. Kingsley did not know. Yet he felt nothing.

So far it was a success.

So far—and yet so futile. It was, he thought, like having a brand new telephone

of the Scientific Marvel of Teleportation?

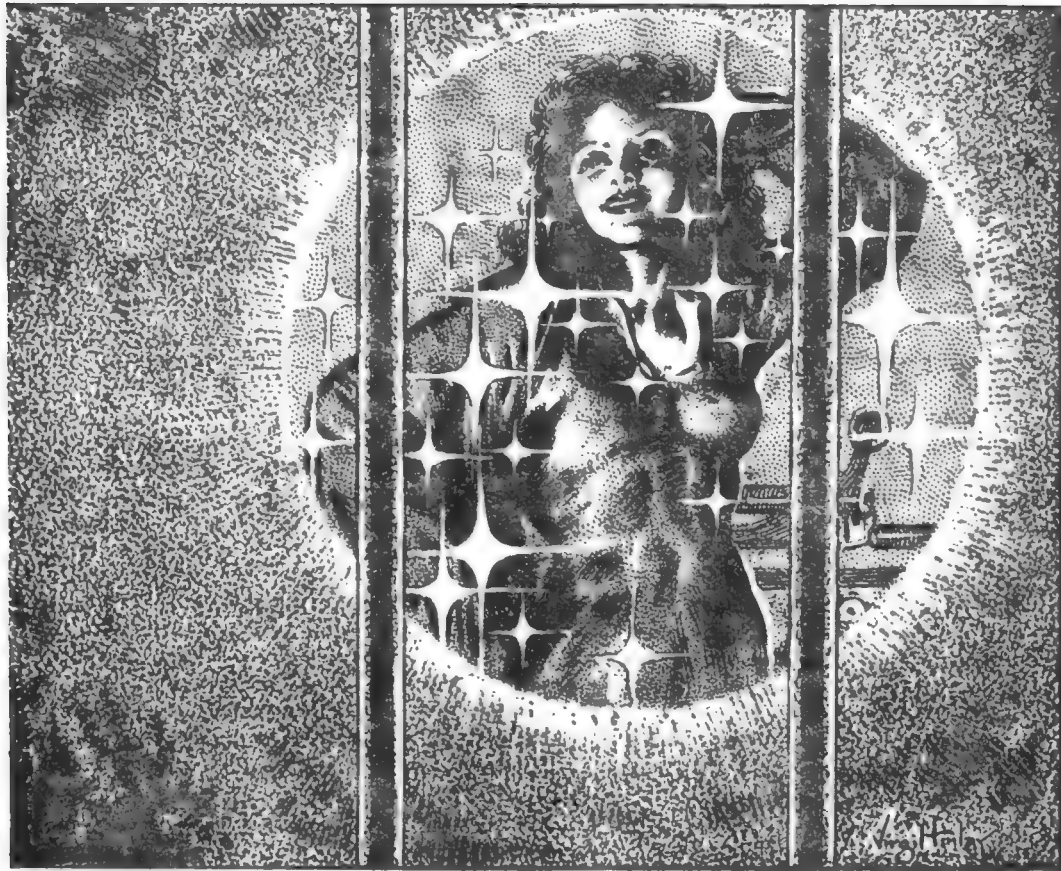
should have come against the silver plate regardless of its change in color. It was not supposed to stop, yet Kingsley really did not believe that the pencil would do anything else even though he had designed the gear after making the preliminary discoveries. It was so utterly fantastic that he himself did not really believe it.

Gingerly he pushed the pencil forward and

side—there was no light. Or not much, anyway, compared to the high level of light in his laboratory.

Joseph Kingsley withdrew the pencil and inspected it. It had not changed.

He looked through the plate. It reminded Joe of peering through a three-inch porthole from a brightly lighted room into a dimly lighted space, or perhaps looking out of his



framed by a circle of light

then he knew that the point of the pencil was beyond the surface of the silver plate. The plate was invisible, now, but in the three-inch expanse, Kingsley could estimate the virtual surface reasonably close. He shoved the pencil in deep; stopping only when his fingers were close to the invisible surface.

He looked at the pencil. It seemed normal enough. It was illuminated by the light in his room passing through the three-inch circle made by the silver plate. On the—other

room onto the street through a three-inch hole in the wall. A street darkened by night. He could see nothing because the light in the room was too bright.

He shoved a forefinger into the circle with a cautious gesture. It might hurt; it might be dangerous. Kingsley did not know. Yet he felt nothing.

So far it was a success.

So far—and yet so futile. It was, he thought, like having a brand new telephone

on a world where there were no other subscribers. He could reach out for the world but the world could not answer. Yet, if his theory were correct, both pencil and forefinger must have been reaching and pointing for—something, somewhere!

Joe Kingsley cranked three of the dials on the front of a panel near by. The hole changed color once during the spinning of the dials, but Joe was unable to relocate the setting. At a later date he would have calibrated them, but now they were standard dials that read from zero to one hundred and were meaningless in any terms but the percentage of half-rotation of the dial itself. Even an intrinsic zero for the equipment did not coincide with zero on the dials, because true zero required an electrical balance and not merely zero input.

According to theory, there must be somewhere a three-inch circle that looked out of a darkened spot into his laboratory.

Kingsley wanted that other circle to enter his own lab so that he could experiment with both ends.

It was a solid half-hour later before Kingsley saw the circle lighten once more and he fiddled with the dials carefully, balancing them as close to the theoretical zero as he could. The circle lightened in swoops and darkened suddenly as he fiddled, and he saw, in those swift changed, brief flashes of the laboratory, as if seen through the eye of a motion picture camera swinging madly on a boom and making wild random zoom shots.

He finally got the thing stable, then spent another half-hour fixing the circuit with fine-tuning verniers so that he could control the position of the circle. Before, a hair-breadth on the dial sent the far circle swooping beyond calculation.

The Kingsley looked through his circle at a bench on the far side of the room, where a screwdriver lay. Taking his tongue between his teeth, Joe reached into the three-inch circle before him, reached down on the bench he saw through the circle, and picked up the screwdriver.

Across the room, his hand appeared in space above the table and grasped the screwdriver. To a hypothetical observer from that vantage, it would seem as though a three-inch circle appeared in space, behind which stood Joe Kingsley and a pile of equipment. It was the opposite of Kingsley's view. Where Kingsley was looking through a three-inch hole in a wall at the outside or at

the bench, the bench was oppositely looking through the same hole in the same mystical wall at Kingsley and his equipment.

KINGSLEY drew the screwdriver back through and looked at it. It seemed quite normal.

Then the enormity of the thing struck Kingsley, and he sat down quickly. It was too much. He had just succeeded in making a teleport, surpassing the dreams of many writers of science fiction. This was not story for the imagination, this was fact, and it was so fantastic a fact that Joe Kingsley had to rest both his mind and his body before he could continue.

He reached for a cigarette, and grunted when he found his pack empty.

It was now about four o'clock in the morning and every place he knew of closed. He wanted a smoke desperately, which desire was heightened because he had none.

Kingsley looked at the gear speculatively, and from the gear to the screwdriver he held in his hand.

If Kingsley could steer this thing, he could get cigarettes.

He turned the dials carefully, but saw the circle swoop away far too rapidly. It passed bright patches and dark spots with a kaleidoscopic rapidity and poised—somewhere—while Kingsley peered through it hopefully.

Not too far away were a few lonely lights that strove in sheer futility to cast illumination on a dark and sleeping countryside. Town, without a doubt, from a distance.

Again Kingsley turned the dials carefully, and the circle approached the town at an odd angle. It poised in the middle of an intersection illuminated poorly by the single light high on a pole at one corner. But on the corners of the intersection that Kingsley could see—two were behind him through the port—were a filling station, a drug store. Both stores were unmistakably familiar and required no more identification.

Kingsley turned the dial-vernier and the circle swooped forward and entered the drug store. Near the door Kingsley located the cigar counter, and because it was dark in the store—the only illumination cast on the scene came from the light in Kingsley's laboratory—Kingsley merely reached for the first pack of cigarettes he saw.

Then because Kingsley was an honest man, he fished in his pocket and dropped a quarter in the cash drawer. The ring of the

cash register bell was loud in Kingsley's laboratory—and also in the drug store.

Kingsley retreated rapidly, turning off his gear after he drew the cigarettes back into his own bailiwick. He lit one idly, paying no attention to the pack other than to strip the paper from it with a letter opener. The paper went into the wastebasket and the cigarettes went into his cigarette case.

Then Kingsley relaxed and smoked, planning his next move.

This was not hard to do. The first thing was to make a teleport with a four-foot circle so that something larger than a hand could enter it. No, the first thing was to hit the hay and get some sleep. Then would come the time to rebuild and refine.

He sighed at the equipment. It might take another couple of weeks before he could again do this. The new equipment would require cannibalization of the present gear. The salary and the appropriation of a college professor in theoretical and practical physics does not permit grand expenditures for fancy and special equipment.

First sleep. Next rebuilding. Then announcement of his success. And then to reap the profits from a machine that would make him a fortune and bring him undying fame.

Joe Kingsley was wrong. His first move should have been to inspect the package of cigarettes, instead of letting his practised fingers open them without his eyes seeing them.

That might have saved him a lot of trouble.

CHAPTER II

Wheels-Within-Wheels

WALTER MURDOCH of the Treasury Department entered his superior's office with a smile. His boss handed Walter a cigar.

"Sit down, Walt," he said. "We've a case for you."

Walt nodded affably. Tony Monroe did not call his operatives into the office for any other reason.

Monroe handed Murdoch a quarter and asked, "What do you think of that?"

Murdoch placed his cigar on the ash-try and looked at the quarter. Then he gulped,

looked at it again, and exploded into lurid profanity.

Tony Monroe nodded. "That's what we all said. What do you make of it?"

"It's a perfect mirror image!"

"Precisely. And though you've had only a chance to inspect it visually, we've made comparison photos. The thing is a perfect mirror image."

"It is?" asked Murdoch incredulously.

"Blown up a thousand times in the comparison projector, a photograph of this phony and a real quarter from the same mint register perfectly—so long as this one's lantern slide is put in the projector reversed."

Murdoch looked at the reversed quarter. "Now why in the name of sin would anybody make a reversed die of a coin?"

Tony Monroe shook his head. "I could see some amateur counterfeiter making a reverse image with a bit of his own-built gear. Some guy who hadn't thought too much about the process—a rank, ignorant amateur. But this thing is mechanically perfect. It would take a master die cutter to make a coining die of that perfection, and any master die cutter would know how to make it come out properly. Furthermore, the department metallurgists tell me that a sliver from that phony is precisely correct coin metal."

Murdoch whistled. "So we have a quarter made of perfect coin metal, from a die mechanically perfect, but mirror-reversed. What about the guy who took this?"

"A small store in Holland, Illinois. The storekeeper, a Timothy Lockland, knows nothing about it. Doesn't know where he got it."

"Believe him?"

"I do. He called the bank as soon as he found it."

"Fingerprints?"

"A smudge. The storekeeper's; two bank-teller's; and one other. We're running through the card files now. At any rate, Walter, you're it. Track this thing down and clean it up. Heaven alone knows who's tinkering with coins this way, but we'll have to find out."

Murdoch took the coin close to his eyes again. He shook his head unhappily.

"This is a first class mystery," he said. "I doubt that counterfeiting has much to do with this case."

"Nor do I. But even so, they're monkeying with U.S. coinage, and we've got to stop

them. It's a fine thing, I'd say. But—"

The buzzer on Tony Monroe's desk called his attention and he snapped the switch, to hear, "Mr. Monroe, the files are ready for you."

"Bring 'em in, Trudy," he replied.

A girl brought a sheaf of papers in to Monroe's desk. Monroe handed them to Murdoch, who riffled through them quickly. There were not many—a statement made by the storekeeper, and statements by the bank tellers. A photo of the quarter taken through the comparison projector showing the perfect registry of real and phony quarters when the latter was re-reversed. A fingerprint photograph, showing the outlined areas of several prints, each numbered and keyed to various fingerprint records of the people involved, including one with a question mark scrawled on it. The latter was in a brief folder by itself, and Murdoch opened the folder.

"This guy's in jail, Tony."

"Yeah, I know," grunted Monroe unhappily. "I've just called the warden. Number Three-forty-seven—eight-eighty-nine—forty is still in his cell and has been there all along. I told Warden Daniels not to do or say anything other than to keep a quiet watch. We'll do our own investigating of this mad thing. The papers are keeping it quiet, too."

MURDOCH nodded and dropped the quarter into his pocket.

"This is a start," he said, tapping the file folder. "But that print's rather small."

Monroe nodded. "A mere fragment. Not enough to get a conviction, I'll admit. Just barely enough to get the general classification. About all we can do is to see if there is a connection between the ones that fall into this classification and the real act."

"There were others?"

"About eight. Five of them fall in the general grouping, but their match is imperfect with the fragment. One was executed for murder a month ago and was taken from the files on active criminals, but the red tape hadn't caught up the general card file yet. The other came from the general identification files and was a blueprint clerk in a war factory during the late unpleasantness. A girl of twenty at the time, since married to a lieutenant in the Navy and now raising a brood of embryonic naval officers and Waves while her husband is skippering a sub chaser and stationed within a three-inch

rifle shot of their home. Somehow I can't connect her with this."

"So it boils down to Norman Blair, alias Norman Black, alias Ned Burrows. Age thirty-two. Convicted of forgery, theft, and tampering with the mail. Now serving twenty years for attempted bank robbery. A ruthless character unlikely to be or become a trusty, and more likely to be carefully watched at all times. How in the devil can a jailed crook do some of the things they get away with?"

"I'll never tell you," agreed Monroe. "But there it is, Walt. Take off and see what you can uncover. . . ."

There was little he could get from the jailbird. Norman Blair's constantly repeated answer was the same:

"I don't know nothing, copper."

"And you've never been in Holland, Illinois?"

"Never heard of it, copper."

"I'm no copper. I'm a Treasury Agent."

"A T-man, huh?" spat Norman Blair roughly.

"If you call us that."

"We calls you other things," snorted Blair.

"And you've never seen or heard of anything like this quarter?"

"No dope'd make a phony quarter."

"Why not?"

"Not profitable."

"Thanks."

"Thanks—for nothing," snarled Blair nastily. "Any fool would know that." He looked at the reversed coin again. "And any fool wouldn't make a reversed die."

"Some might."

"Nope."

"Well," snapped Murdoch angrily, "someone did!"

"Maybe someone turned a real quarter inside-out," sneered Blair.

"Maybe they did."

"A nice trick if you can do it," jeered Blair. "And what good is it?"

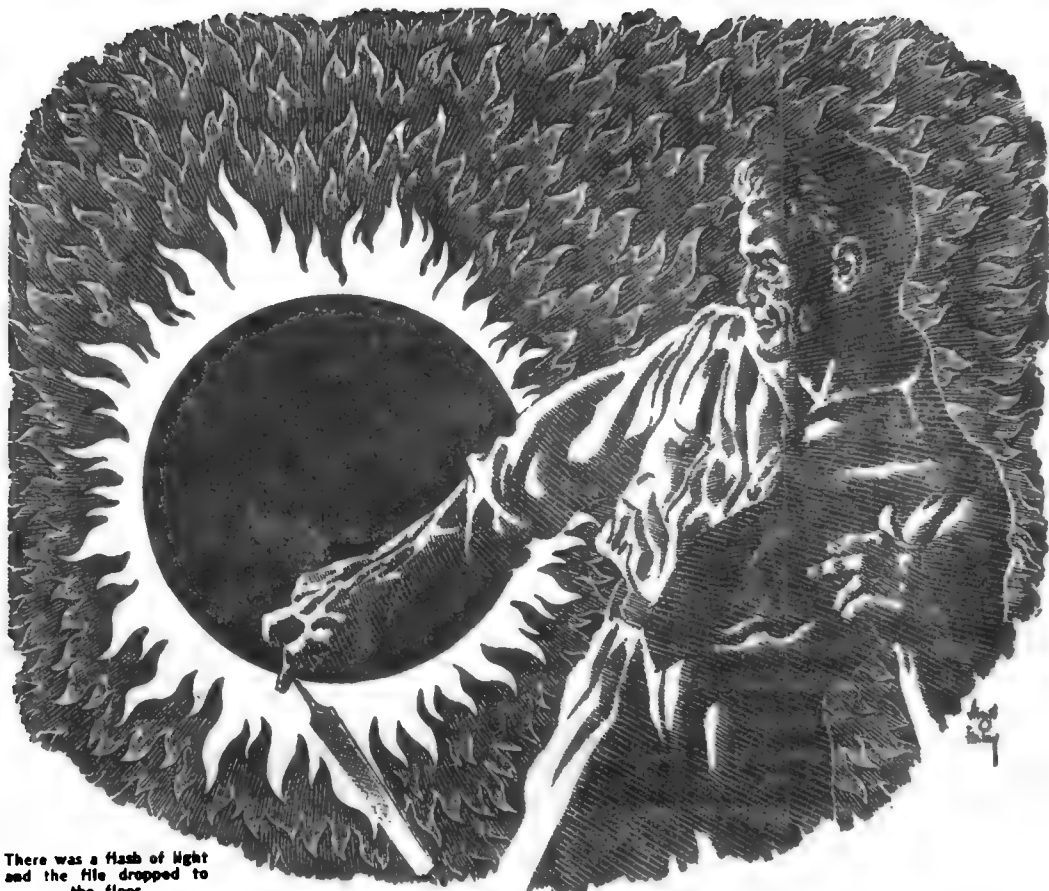
"I wouldn't know. I just want to find out who did it."

"Then find 'em, copper. Someone else, not me. I wouldn't waste my time on quarters, either."

"All right. Just forget I was ever here."

"More'n glad to, copper. You annoy me."

Blair turned and left the office with a sour expression. Murdoch shrugged as Blair left. Then after a period of thought, he turned to



There was a flash of light
and the file dropped to
the floor

Warden Daniels.

"Have you any ideas, Warden?"

"Nope. Only that Blair is a tough guy and we've had him under more than close observation. He broke jail in Arizona once, you know. We'd like to keep him here."

"And where does he go when he's finished here?"

"In about eighteen years he can go back to Arizona to finish out his stretch there. That'll keep him under the wraps for most of the rest of his life. He's been with us for two years now."

"Well this looks like a dead end. I might as well go to Holland and see what's giving at that end. That's where this coin was found, you know."

"I'll wish you luck, Mr. Murdoch."

FLIPPING the quarter, Murdoch caught it deftly. It came down heads—reversed—so that Washington looked to the right.

"I'll need it," he said unhopefully.

Murdoch left after that, and went to his hotel to think about further plans. He was not entirely satisfied with Blair's explanations, but he knew that there was nothing he could do about it more than to ask Warden Daniels to inspect any letters carefully.

Yet as Murdoch left the jail, Norman Blair was writing a letter to a friend. This letter was written in a normal vein. It contained considerable discussion of the state of affairs in the world, his own feelings at incarceration, and what he planned to do eventually. The latter included appeals and ideas for retrials, which were so much talk, but typical of the man.

Concealed in the letter was a word-meaning code impossible to break since the seemingly uncouth usage of improper words conveyed whole phrases of meaning. It went out by mail right through the censor's desk, and was on its way before Treasury Agent Murdoch got a train reservation making con-

nection with the small town of Holland, Illinois. . . .

A week passed quietly, during which time the trail cooled considerably. Murdoch arrived in Holland and met the storekeeper and came away convinced that the man knew nothing of the mystery; nor even how it had happened. He stayed around a few days, but his stay was completely sterile because this was a completely cold trail with not the slightest inkling to lead Murdoch toward a new end.

The recipient of Blair's coded letter arrived a day or so after Murdoch came, and because only the Treasury agent had official sanction, there was even less to be learned. Unknown to one another, both sat and pondered by the hour; wondering what possible move could be made next.

In the meantime, Joe Kingsley had finished his pack of cigarettes without having noted the lettering on any one of them. This seems unlikely at first sight. Yet an inveterate smoker will admit that he is not inclined to read the label on his cigarette, especially one who is busy with his hands most of the time and who may smoke a full package of cigarettes during the working day and another at night.

In Kingsley's case, the twenty smokes were gone by midmorning, a good quantity of them having been burned during Kingsley's nighttime pondering. So the perpetrator of the outrage was himself completely unconscious of his act, and had he been confronted by the evidence itself, Kingsley would have disavowed any knowledge of it. And Kingsley's argument would have the validity of truth, for Kingsley had no idea of the wheels-within-wheels that he had started turning.

The quarter-in-reverse was not mentioned. It was kept from all public notice by the Treasury Department, and the recipient of Blair's letter did not dare broach the subject openly to the storekeeper for fear the authorities would get curious.

What Blair expected was not known. Blair himself did not know. All Blair knew was that something downright odd had taken place and Blair was smart enough to realize that something might be made of it if it could be made to work. And nothing would be lost if the strange affair led to nothing.

So with the veiling of the strange quarter by the Treasury Department, that phase of the thing died. Yet there was one other

item that was neither of interest to the Treasury nor to Kingsley, for neither of them knew about it. It was an item that could reach the newspapers in due time.

And did.

CHAPTER III

Power of the Press

THE STORY broke as a squib item on Page Eight, sandwiched between a recipe for a cake by a popular home economist and the daily cross-word puzzle. Its few lines were both terse and mysterious. It went:

FORTEAN SOCIETY PLEASE NOTE!

Gustave Stanisky today presented this newspaper with its first package of Lemac cigarettes. Stanisky collects cigarette stamps for his son's collection, and found the empty and torn wrapper in his pile of waste paper.

Upon close inspection, the package of Lemac cigarettes turned out to be a perfect mirror image of the wrapper from a pack of Camels.

The origin of this oddity is unknown, and equally vague are the means of doing the job and the reason why it was done. It is suggested that the Fortean Society whose members collect such rare oddities may be interested. Rumor has it that a Lemac smoked backward tastes like a Camel.

This item caught the eye of Walter Murdoch during his dinner aboard the crack train heading toward Washington. He swore roundly because he had left too soon, and because the thing had hit the papers and was now public knowledge. It also heightened the mystery quite a bit, and gave it some weight. A quarter reversed might be an abortive attempt at counterfeiting, but when other things began to turn up reversed in the same inexplicable fashion, it began to look as though more than mere "happenstance" was in the making.

Murdoch called for the conductor and had the train flagged down at the next station. There he fumed and fretted because a full thirty-six hours must pass before he could get back to Holland to look into this new development.

The news item was also seen by the recipient of Blair's letter, and that started a chain of thought. A bit of research disclosed that there were three members of the Fortean Society in Holland, and further research proved that

one of them was an elderly lady who believed firmly in the occult, and was therefore of little use in any discussion of pure scientific fact.

The second was an obscure young professor at Holland University of Science, and might prove interesting. The third was an adolescent of fifteen who was an avid collector of science fiction and fantasy stories.

And so Joe Kingsley opened his door to a gentle knock and blinked as the girl smiled and asked uncertainly:

"Doctor Kingsley?"

"Yes."

"I'm Sally Ransome."

"How do you do."

Kingsley stood there foolishly, not knowing exactly what to do. He was not used to this. The girl was about twenty-four and constructed along very desirable lines all the way from her high-arched feet to her chestnut hair. Her eyes held his naively; nice eyes, large and brown, and their hold almost prevented Kingsley from seeing her generous mouth and finely molded nose.

"I'm a roving reporter from the *National Weekly*," she said.

"I've read it occasionally. But what can I do for you? Come in, Miss Ransome."

"Thank you. I will. As to what you can do for me, have you any ideas about that reversed package of cigarettes?"

"What reversed package of cigarettes?"

Sally held forth the newspaper and showed him. He took the paper and read it through. He shook his head and shrugged.

"A prank, I fear."

"That's what most people will claim—and forget about it. But there's something to it, I think."

"I doubt it."

"But you're a member of the Forteans. You aren't supposed to doubt anything."

HE LAUGHED, and shrugged again. "I do belong to the Fortean Society," he admitted. "I joined several years ago because I was interested in some of the things Charles Fort claimed."

"I've read some of them. But isn't finding a reverse-image wrapper almost as intriguing as a rain of frogs, or people disappearing from sight without leaving any trace?"

"There are two reasons why people might join the Forteans," he told her. "One of them is the one I have—because I happen

to believe that everything has, somewhere, a sound basis in fact. Some scientific fact."

"How about the tales of people who have disappeared, only to turn up some other place in much less time than it is possible to travel regardless of the means?"

"That's happened," he admitted. "Furthermore, just because we do not know the scientific fact that runs an occurrence on one day or during one era is no sign that the scientific truth might not come to light at a later day. Charles Fort and others call this phenomenon 'teleportation' and it has been used by many writers. It is, of course, completely unknown as they write about it. Yet there might—"

Kingsley paused. He realized that he was treading on thin ground. He wanted no mention of his invention until much later.

"Might be what?" she prompted.

"I have no ideas about your cigarette package," he said a bit abruptly. "It must be false."

"The men who know say 'no'. They claim it is printed on good, authentic paper with the same kind of ink, and in perfect reverse-register to an original."

"I'd hate to go on record as claiming the thing might have passed through some sort of a space warp, or something like that," mused Kingsley. "The trouble with these things is that they are entirely too scattered and infrequent. I guarantee that a whole rash of such stuff will come forth now that it's begun. There were the Flying Saucers of a few years ago, you know, and the Loch Ness sea monster seems to make its yearly appearance just before vacation season."

"I'm a bit disappointed," she told him. She stretched, and the gesture showed off to perfection her lissome waist and rounded arms. "I thought that a scientist who was also a member of the Forteans might be able to shed some light on the thing."

"I'm sorry."

"Then your membership in the Forteans is not for any reason than to scoff."

"Why, no," he replied firmly. "I'm definitely interested."

She smiled at him archly. "Yet you say the same thing that Fort said. That everything has an explanation but that we can't understand it."

"That's right."

"But then you refuse to explain anything."

"I don't know everything."

"How do you explain teleportation?"

"Why harp on that subject?" asked Kingsley uncomfortably.

"Because you know something about it," she told him directly.

Kingsley colored. "Not—"

Sally's laugh was apologetic. "I'm sorry," she said seriously when she finished showing him that she knew the score. "I don't mean to pry. Perhaps it is a military secret?"

"I hadn't thought of it in that—" Kingsley shut his mouth with a slight click. He looked at her askance.

"All right," he said quietly. "I'll make a deal with you."

"I'll agree to most anything for a story," she said.

"The deal is this: You print nothing until I'm ready to announce it, and then I'll see that you get first information."

"That is a deal," she said holding out a hand. Her hand was firm, and the pressure of it against his hand tingled a bit.

"Then I'll show you my teleport."

SALLY RANSOME blinked. Her mouth parted a bit, but she held her tongue. She arose and followed Kingsley to the laboratory.

"I'm just polishing off a few last-minute ends," he said. "I've been working on this for a week now."

"Looks like more time than that."

"Oh, the first model took me a long time. It was a small job. I've been making it bigger, and I've been using most of the old stuff in the larger model. That way I've saved time."

"Good idea. But it looks a mess."

"I suppose so." He laughed as he picked up his tools and went to work on the gear.

"When will this model be working?"

"Golly, Miss Ransome, I don't expect it to play until dark."

Sally Ransome seated herself in Kingsley's easy chair and lit a cigarette.

"This I will wait to see," she told him. . . .

At seven o'clock, Joe Kingsley stood up and racked the soldering iron with an expansive gesture.

"Finished?" she asked.

"Finished wiring," he said. "There's just one question. You must be ravenous."

"How do you feel?"

He shrugged. "I'm hungry, of course."

"We could go out and eat," she said. "But what would you be doing if I weren't here?"

He grinned. "Well, I've got about two hours worth of alignment and calibration work to do before it ticks. I'd be inclined to do that."

"Then you go right ahead," she told him. "I can wait, and then we can take enough time over our meal to taste it. Otherwise it's hot dogs and coffee gulped on the run so we can get back. Right?"

"Right," he said with a look of admiration.

He turned back to his equipment with a smile and began the arduous job of adjusting the gear. His two hours were a good estimate, and at nine o'clock he arose from the back of the equipment and announced that it was about to make history. He pointed to the four foot disc above the table.

"Watch!" he said.

The silvery disc grew dully translucent as Joe Kingsley advanced the power. Then it went into transparency and Sally gasped as the solid silver plate became glass-clear.

The teleport looked from the laboratory into another room in the building, and he turned a dial which caused the plane of view to retreat until it passed through the wall into their own room.

"I had a bit of trouble on my first try," he told her ruminatively. "I drilled a three-inch hole in the wall over there."

"How did you do that?" she asked, leaning forward interestedly.

"By running the thing forward for transfer while the power was full on, instead of merely watching. Now I merely use it to look through until I see where I want to go. Then I turn on the final dollop of power and the thing is not only transparent, but non-existent."

"But how does it work?" asked the incredulous girl.

"Space is curved," he said. "Curved in the fourth dimension. Inasmuch as this thing looks anywhere we want it to, it must cross space directly. Actually, it works because of a bit of rather involved field theory. In simple terms—which because they're simplified are subject to argument for absolute fact—it is a situation where time and space are factors normal to this particular universe or environment. However, neither time nor space have the same meaning when you traverse a space or a universe that has no connection to this one. So the teleport connects two locations in this space with no apparent distance between them."

"But why?"

KINGSLEY picked up a bit of paper, and put two dots on it about three inches apart. Then he folded the paper so that the dots touched one another.

"See? The two-dimensional paper is curved in the third dimension so that the two dots are touching through one dimension but three inches apart in the other."

"But you can't tell me that this room full of equipment is powerful enough to cause any warpage of space you feel inclined to bend?"

He shook his head. "No, even the mass of the sun warps space only a minute bit. But the case is that we cannot really get any mental picture of a curved space. It may be curved in many ways, and might even have a multiplicity of curves. Since it curves in the fourth dimension, there is always some curve that will cause any two spots to be adjacent, and these curves are constantly variable so that you move smoothly from one to the other as you change the power."

"I'm still dull," she said, and smiled.

"That's hunger," he said. "And while I'm demonstrating, I'll make another attempt."

He twiddled the dials until the scene went down into a lower floor. He approached the stove first, then switched in the extra power. Then, standing before the circle, he reached through and took the coffee pot from the stove.

He turned the scene to a cupboard where he got coffee from a flower-printed cannister. He filled the coffee pot, placed it on the stove, and lit the gas. He turned the scene to the refrigerator and took a paper-wrapped package.

"Hamburger," he said.

CHAPTER IV

Mobius Space

JOE KINGSLEY set the meat in the pan, then went back to the cupboard. From this he took plates, knives, forks, cups and saucers. He handed them back over his shoulder with a flourish, and Sally Ransome set a corner of the laboratory table.

Then, watching the frying hamburger, Kingsley continued to explain.

"You've seen the normal curve of a func-

tion—a curved line running across a piece of cross-ruled paper?"

"Yes."

"Have you ever seen a three-dimensional graph?"

"No."

"It's called a functional surface. It has places that show the function of two variables. You can vary either of them, and the position of the intersection shows the function. You can vary one of them in a minute increment and the function may move only slightly. It's like drawing a series of lines on a curved surface, like—like a contour map." He gave her a pleased glance. His fumbling had found the proper simile and he was happy.

"So," he continued, "the tide can come in a thousandth of an inch, and the contour will change minutely. So in a four dimensional graph, you change the function slightly and the space-curve changes slightly—not abruptly but smoothly—and you have another location. Follow?"

"I follow, but I'm a long way behind. All I know is that it seems to work. How's the hamburger?"

"Done," he said.

He handed the food over and took the coffee pot from the stove. He poured.

"Not the Biltmore," he said. "And even so, it's just the thing you didn't want a couple of hours ago."

"Here it's fine," she said. "We can still talk. I like it. Two, Joe."

Kingsley's spirits lifted again. He dropped two lumps of sugar in Sally's coffee and settled back in his chair. Sally tasted the coffee.

"I think I'll need another lump," she said apologetically.

Joe laughed and dropped another lump in her cup. "Come from a long line of chemists?"

"Why?" she asked, stirring vigorously.

"All chemists seem to take about nine spoons of sugar per cup," he told her.

"Why?"

"No one knows, not even chemists. But it's apparently a habit."

Sally tasted and then shrugged her shapely shoulders. "Just call me chemist," she said. She held up the cup for another lump.

"This is ridiculous," she said. "I'd normally say that four lumps would make this taste like syrup."

"It should," he told her. "Mind?"

"Not at all."

He tasted gingerly. He shook his head.

"What kind of sugar is that?" she asked.

"Standard dextrose."

"I didn't ask the chemical name for it. Who made it?"

"Same people who have been making it for years. Standard brand."

"It's been cut," she said.

"Well, use more and we'll discount it."

Sally dropped in more lumps and stirred again.

"Dextrose," she said glumly. "As puny a grade as any. What we need is saccharin, I guess."

He laughed.

"Well, all I know about it is that some people use saccharin. What else is there?"

Kingsley smiled, happy to show off his knowledge. "There are about nine different kinds—perhaps more. There's dextrose, fructose, levulose . . . Levulose!"

"What is levulose? Sounds like a bad name."

"Maybe they got some levulose mixed in with the batch," he said musingly.

"What is levulose?"

"Levulose is similar to dextrose except that it is about one-tenth as sweet as sugar."

"How do you tell 'em apart? Taste?"

"That's one way. Dextrose is a flanged-up nomenclature for 'right-hand sugar' because dextrose polarizes light to the right. Levulose means 'left-hand sugar' because it polarizes light to the left. Yet their molecules are built the same except that one is a left-hand image of the other."

"Joe—get me the package!"

HE NODDED, went to the machine and returned with the sugar carton. He shook his head glumly. The box was lettered in reverse.

"And, Joe—did you get any cigarettes through this thing?"

He nodded, slowly. He was stupefied with the enormity of it all. He returned to the machine and cranked the distance back so that the plane of view looked in on the same room. He picked up a screw and inspected it.

"Left-hand thread," he said. He shoved his hand through, and Sally caught it between her own.

"Is that your right hand?" she asked.

"It is."

"It came out left."

Sally handed him the sugar package after taking out one cube. It came through the machine re-reversed so that it could be read normally.

He tasted the reversed cube and one that had come through the second time. The re-reversed sugar was normal, the other weak.

"Well," he said, "that's it!"

Sally left the laboratory at midnight, and by the time she left there was no doubt. Screws, shoes, printed matter; all of them went through reversed. Her parting word was humorous:

"You could sell this to a shoe factory," she told him. "Then they could make only right shoes and send half of their production through the machine. Save manufacturing costs."

He nodded glumly, and wondered where he had heard the same words before. He pondered this for some time after she had gone, and he went to bed on the couch in a spare room below. He went to sleep thinking about it, and dreamed about it after slumber claimed him. . . .

Norman Blair felt the feather-light touch on his lips and came awake quietly. This business of awakening quietly was a matter of practise in an institution where any nighttime commotion was cause for instant investigation by the guards. It was sensible to come awake quietly because friends bring news that could not be passed along with an angry guard ordering you to separate. And because it might be an enemy, Norman Blair came awake with one hand inside a slit in his mattress; his hand clenched around a sliver of steel that had been whetted to a razor edge.

"Norm!"

"Sally!"

"Shut up," came her fierce whisper.

"But how in the—"

"Shut up and ask later. Get up and come here."

In the dim light Blair could see a large circle of somewhat lighter texture. Framed in this circle was Sally. She seemed to be standing waist-high in the circle, and it put her feet a good four inches below the level of the floor. The bottom rim of the circle was a few inches above the floor. Blair shrugged.

"Is it safe?"

"Yes," she whispered. "Now come on—quick!"

Blair asked no more questions. He

climbed through the circle and fell heavily to the floor. The sound created enough disturbance for the guard to come running with a challenging command.

Sally snapped the switch and the circle disappeared before Blair's amazed eyes, and it returned to its shiny silver surface.

"Your guess was good," she told him.

Blair stood up and looked around. He reached for her with his right hand, and she laughed.

"Southpaw," she chuckled.

"What do you mean?" he demanded.

"You're reversed."

"I'm what?"

"Shake," she offered.

He held forth what he had known for thirty-five years to be his right hand. Approaching it was what appeared to be the girl's left. She laughed and explained, cranking the dials back as she talked.

"You'd find things hard to read," she told him, and he nodded as he picked up a book.

SALLY watched the plate until the laboratory was in the field of view. Then Blair stepped through the teleport and when he came out the far side, he looked back at her—but over the wrong shoulder.

"I'm over here," she said. "You've been reversed back again."

He shook his head. "No more of that for me," he told her fervently. He looked at the gear contemplatively. "But it looks good. Just what goes on?"

Sally Ransome began to explain. . . .

It was a mad dream, as all dreams are. A vast machine that combined the more complicated features of a cross-sectioned internal combustion engine and the turned-inside-out interior of a Burroughs Calculator stamped, ground, formed, and assembled shoes that came curling forth on a swiftly moving belt of flexible metal.

The moving belt slowed farther along its curving extension and came to a gradual halt, and as the belt moved more and more slowly along its length, the shoes began to move. Slowly at first they moved, then extended into a saunter, which changed to a walk, and then to a brisk trot, and finally into a bold and open run as they reached the place where the belt ceased to move.

Though the belt slowed in its motion, the shoes increased their speed so that the shoes always moved forward at the same speed. Just beyond the place where the belt ceased

to move, the shoes passed a tall, green-painted stop-sign which flashed alternately red and green.

Here the running stream of empty shoes divided. Every second shoe arrived coincidentally with a red light and paused before it leaped from the belt into an open box. The rest continued on, up, around, and over, running madly until they went the length of the broad metal belt, which returned upon itself and joined smoothly.

The shoes leaped into the same box as their fellows had entered—but now they were all left shoes, because they had gone completely around the belt, which was twisted into a Mobius Strip.

A veritable giant of a man came and picked up the box. He saw Kingsley and with a piece of blue chalk, he wrote "One, Two, Three, Infinity" on the side of the box. As he turned away, there was a large block letter sign on his back. It said George Gamow. The giant left, and Kingsley leaped onto the belt to follow.

Kingsley paused at the stoplight because a voice said:

"But it looks good. Just what goes on?"

"It's Mobius Space!" yelled Kingsley.

He leaped from the production line Mobius belt—fell to the floor in a welter of bed-clothes!

Then he remembered.

Gamow. A gentleman with a sense of humor and a definite talent for explaining the more abstract bits of higher mathematics in terms that the man in the street could understand and enjoy reading. It had been Professor Gamow who had hinted that space might be twisted in the Mobius fashion, and that shoes sent across space might turn out to be left shoes, thus simplifying the production problems.

"That's where she heard it before!" muttered Kingsley.

CHAPTER V

The Hijacker

BELOW in the laboratory, Blair looked at Sally. "What was that?" he asked in a whisper.

"Joe Kingsley."

Blair picked up a heavy file and hefted it

menacingly. Then he dropped it on the bench again with a clatter.

"He's valuable," Blair said shortly. "If this gimmick goes wrong, someone's got to repair it."

"What are you going to do?"

"Take him."

Sally smiled wisely. "He's soft on me. Make it look like you've kidnaped me, too, Norm."

"Why?"

"You're soft on me also. Would you act quick to see me saved from having my feet burned?"

He winked at her instead of answering. He reached for Sally quickly and carried her to the chair, where he dropped her roughly. He roughed up her hair and slapped her across the face several times, not sharply, but enough to bring an unmistakable flush to her cheek and a few tears to her eyes.

He tore her tress at the shoulder a bit, and then added another inch to the tear after he saw the result. More soft white shoulder gleamed, and Blair nodded calculatingly.

Above, Kingsley blinked uncertainly as the file clattered and then, wondering why burglars would enter a laboratory, he headed for the stairs.

He entered the laboratory and was met with a sharp chop against the side of his head from the edge of Blair's hand. He slumped, senseless, and when he opened his eyes, he was neatly taped with electrician's tape. He looked around and assumed that the tape on Sally's wrists was as tight as that on his own. He glared at Blair.

"What goes on?" he demanded.

"I'm taking over."

"But you—"

"Shut up, chum. I've done it."

Kingsley looked at Sally. The girl shrugged unhappily.

"He met me as I left," she said.

"Anybody who's working this late at night must be doing something good," grunted Blair. "And then there's that strange coin and the reversed cigarette package."

"What reversed coin?"

"The one you tossed into the coin box at the corner. Huh! Looks like I got here second." He glared at Sally.

"She's a magazine writer."

"That so?"

Sally nodded.

"Maybe," grunted Blair. "And maybe

you're fronting for another gang."

"She couldn't be!"

"Shut up." Blair faced the gear. "How does this run?"

"I'll never tell you."

Blair faced Kingsley coldly. "Like to watch me slice off a few toes?"

"You won't make me talk."

"Brave man," sneered Blair. "But I mean *her* toes!"

"You wouldn't."

"Watch." With a swagger, Norman Blair went to the tool table and inspected it critically. There were saws and files and drills and other items of the metal-worker's trade, but no knife. Blair grunted angrily, and turned to face the taped-up pair.

"There are other means," he said ominously, angered by his failure to find a knife.

He looked around the room and his eyes fastened on the teleport. It had been turned off by the power switch and the controls set as Sally had left them following Blair's reversal.

The distant plane of view was not many feet from the prime plane, and Blair knew it. He could run the gear if he had to, for he had seen Sally do it. He preferred to pretend ignorance, however, because it gave him a better chance to learn the workings of the equipment, and would also give some weight to the pretense of Sally's innocence.

HE FUMBLED with the switch uncertainly. He swore at Kingsley for not labeling the controls, and called the scientist a fool. He realized in his mind that the scientist was familiar enough with the gear to know its every part, and so needed no labels, but he did not say so.

He snapped the switch, and the silver plate changed slowly from solidity to translucence to complete transparency. Then, with a sly grin, Blair went over and lifted the bound girl in his arms. He carried her forward until her feet entered the circle.

From Kingsley's position, he could see back into the circle. His field of view showed most of the girl's body and Blair's hands as he held the girl suspended. It was an eerie sight, for beyond them he could see Blair facing away from him, holding the girl with her feet extended through the circle and beyond the girl's feet he could see his own—

No! It was not an *image*! It was himself!

His mind corrected itself almost automatically, though he struggled to comprehend the

completely strange condition. It was something that never before had happened.

Blair lowered the girl until the bottom of the circle supported her legs just across the back of the knees. With the hand so freed, Blair reached for the "OFF" switch, turning back to Kingsley.

"Might be interesting," he said callously. "When this goes off, will she be stretched out a few yards at the knee or will her legs just drop off?"

Kingsley did not know, and the idea made him turn a bit sick. Sally turned a true pale and screamed.

"Give you three," snapped Blair. "One, tw—"

"You win," said Kingsley in a dry voice.

Blair laughed sourly and lifted the girl back to her chair where he dumped her unceremoniously. Then he went back to the tool table and found a file which he poked through the circle. He snapped the switch.

There was a brilliant flash of white, a brief wave of heat, and a sound similar to the blowing of a fuse. The far end of the file dropped to the floor with a clatter and the cut end smoked as it hit the linoleum. The end that Blair had was held only for a moment; then it grew hot along its length as the heat at the end came along the length of the file. Blair dropped it with a howl.

"Now talk," he snapped.

Kingsley began to explain. . . .

* * * * *

The porter came through the sleeping cars quietly and tapped at the bedroom door. Walter Murdoch came out of fitful slumber quietly and opened the door expectantly. The porter handed him a telegram, explaining that it had been picked up on the fly at the last town.

It was in code, but Murdoch went to work on it quickly, and came up with:

RE REVERSED PRINTS CLASSIFIED AND SIFTED TO PROFESSOR JOSEPH KINGSLEY OF HOLLAND COLLEGE OF SCIENCE. GOOD LUCK. MONROE

MONROE

Murdoch nodded. He knew that by "classified and sifted," Monroe meant that the cards had been run through the selector machine and had come up with several, and that these had been sorted as to possible connection and discarded until only the glaring connection between Joseph Kingsley and the town of Holland remained.

This at least was a true lead, one that he

could get his fingers into. He consulted his watch and then went back to bed. He would arrive in Holland by early morning and that was as soon as he could make it.

Tomorrow would be a busy day!

* * * * *

"And so it's like that," said Blair with a sneer. "And the next thing to do is to get this junk to some safer place."

He scoured the laboratory and the other rooms and returned with a .32 target pistol, which he inspected cynically. A gangster of the first water, Blair preferred the heavier .45 automatic, but this was at least a weapon, and that was what he wanted.

His handling of the teleport's controls was crude but he knew that practise with the machine would increase his dexterity. His first move was to locate a garage containing a moving van. Then he marked the controls carefully.

NEXT, Blair returned the distant circle to the laboratory and stepped through.

Reversed, he had some trouble with the controls, but he reset them to their pencil-mark calibrations and thickened the plate until passage was possible. He picked up his pistol and stepped through. He breathed a sigh of relief when he attained the distant garage without trouble. He looked around the garage warily, and then walked boldly towards the moving van.

"Hey! What goes?" came a challenging cry.

Blair turned and coldly pulled the trigger. The watchman fell, squirmed once, and was silent.

Then Blair opened the doors of the garage and drove the van out. He paused long enough to close the doors because he did not want the watchman to be found while the teleport circle was available.

He stopped the van before the laboratory a half-hour later and raced upstairs to turn off the machine.

"Now," he said. "Before I start taking this stuff apart, I'll send you fellows to a nice safe place."

Blair turned the machine on again and sent the controls spinnings. He located a neat house beside a lake and grinned happily as he inspected it through and through.

"Everything neat," he said. He picked up Kingsley and with some difficulty he carried the scientist to the circle. "You in here," he said, and he shoved Kingsley

through the circle.

Joe Kingsley landed on his side and turned over in time to see the circle vanish. He wondered in which room Sally would be put, and then started to struggle with his bonds.

Kingsley intended to break out of this place at once and give the alarm.

He was still struggling with the metal walls, the heavy shutters, and the sealed door, and cursing the complete lack of any tools when Blair and Sally Ransome left the laboratory with the machinery all neatly disconnected and stored in the van.

It was slightly past the gray of dawn.

CHAPTER VI

Too Much Coincidence

MURDOCH yawned as he stepped from the train and looked around for a taxicab. Holland, he thought, must be a really small town. There was nothing awake. Nothing awake, that is, excepting the big transcontinental truck that was waiting for the train to start so that it could cross the tracks.

He saw a sign pointing to Holland College campus and began to trudge down the road in the early morning light. He yawned again and swore that some day he would quit this nerve-wracking job and take up a nice quiet one. Something like the guy driving the moving van, who was sharp enough to have a woman going along with him.

The train moved on, and Blair crossed the tracks and left the scene as the Treasury agent headed up the road toward the laboratory.

It was before things should begin stirring, but Murdoch beat on the door of the laboratory anyway. Then he waited and waited, and the ring of cigarette butts grew about his feet as he sat there on the gray stone and fumed. It was almost eight o'clock before the first of the townspeople began to stir about.

"I'm Murdoch," he said to the first man who came to the laboratory. "I'm looking for Professor Joseph Kingsley."

"I doubt that he is here," said the man. "I'm Edward Holmes. Kingsley usually gets here about nine."

"I'll wait."

At nine-forty, Murdoch went inside and asked Holmes where Kingsley lived.

"He has a small apartment at Forty-one Normal Street. Occasionally he sleeps in the rooms we have here for men who have worked too late. I looked there, however."

"He wasn't there, I take it."

"He was not. I am a bit puzzled, though. He had been here. The bed had been used but was not made. Most of the men are neat, and Kingsley was one of the best. I'd try his home."

"Telephone?"

"Of course."

Holmes led Murdoch to one of the offices and used the telephone. There was no answer.

Murdoch then requested a taxicab, and waited with Holmes until the cab arrived. Hiring the cab for the day, Murdoch was driven to Kingsley's apartment. He burgled his way in with a set of master keys and saw at once that the apartment had not been used for days.

He went back to the laboratory and asked more questions, checking on Kingsley's habits. Then, to check upon some of Kingsley's habits in person, Murdoch took to his cab again.

The feeling of frustration welled once more in Murdoch's heart, and he felt glum about missing the scientist. He realized that he had not eaten breakfast, and asked the driver to drop him at a restaurant—and how about a cup of coffee?

"Sure."

"Know Kingsley?"

"Nope. Heard of him, though. Seemed a smart enough feller. Newspaper?"

"I suppose. Any funnies? Nothing of real interest to an out-of-towner, you know."

"We have a good one," said the driver proudly.

The newspaper was fair for a town of that size. It was filled with local items about people who were undoubtedly all well-known to the rest of the town, for the personal angle was high in every item. The comic strips were good; taken from a national syndicate and given prominence.

The radio in the restaurant stopped playing music as Murdoch finished the paper, then there started a news broadcast. Indolently, Murdoch listened to the radio while finishing his coffee, and did not realize what he had heard until the account was almost over.

Then he sat bolt upright and told the driver:

"The police station and make it quick. . . ."

I'M CAPTAIN HARRIS, Mr. Murdoch. What can I do for you?" The police captain handed Murdoch his credentials and looked expectantly at the Treasury agent.

"I just heard a news broadcast and I want to know the particulars."

"Which one?"

"Someone was found murdered in a garage."

"Oh. Tim Lake. Too bad about Tim. Tough lines for his wife and kids."

"Have any idea who did it?"

"Some foreigner, no doubt."

Murdoch smiled. "How can you tell?"

"The bullet was about the size of an American thirty-two, and the right weight. But the ballistics man tells me that it must have been one of the foreign guns, because the rifling was to the left instead of to the right. He told me that some foreign guns are rifled left-hand."

"That's what I wanted to get straight," said Murdoch. "What kind of a gun did he say it was?"

"He didn't know."

"Um. I wouldn't know either. I doubt that any English gun is rifled to the left, and most of the French and German guns are millimeter sizes, neither of which popular sizes fall too well into the thirty-two caliber class. The seven millimeter is about two-seventy-five thousandths of an inch; and the nine millimeter is about three-fifty-four thousandths. I'd have to check the gun expert at the Bureau to state with any positiveness, but I believe that left-hand rifling is comparatively rare."

"Then what in heaven's name—"

Murdoch shrugged. He contemplated the situation for a moment and decided that there was far too much highly circumstantial evidence to start a hue and cry for Joseph Kingsley. After all, Murdoch knew too little. There was a reversed quarter that came from Holland with fingerprints on it which, when reversed again photographically, became the prints of Professor Kingsley. There was a reversed folder from a pack of cigarettes, also from Holland. There was the rather strange disappearance of Kingsley, though Murdoch had not checked too thoroughly as yet. And now this bullet,

claimed to be a .32 but shot from a gun that was rifled to the left. A gun that there was little likelihood was an American weapon.

Even so, the chain of circumstance did not lead too directly to Joseph Kingsley. Not enough to start a hunt for the scientist.

The telegraph in the police station started to rattle, and the tape came spilling out at high speed.

"Pardon me," said Captain Harris.

He went to the machine and began to read the tape, leaving Murdoch to think the situation over more thoroughly. Harris came back shaking his head.

"Trouble?" asked Murdoch sympathetically.

"Yeah. Jail break."

"That's bad."

"You bet. A rather clever fellow, too."

"How did he do it?"

"No one knows. Of course, the tape was quite sketchy, but it said something about a convict named Norman Blair being found missing this morning at check-up. The means of his escape were unknown since he was locked in his cell last night. His cell-mate knows nothing about it."

"Who?" demanded Murdoch.

"Norman Blair. Know him?"

"Slightly," said Murdoch, stunned by the sheer accumulation of coincidence.

The trail here pointed more or less to Kingsley because of the fragment of fingerprint on the spurious coin. And now to have the further coincidence of the convict, Norman Blair, break jail was too much.

Blair possessed at least one minute fragment of fingerprint that was a mirror image of some finger of Professor Kingsley. At least, similar enough so that there was plausible connection between the two fragments. Of course, one cannot state identification on the basis of a mere quarter-inch square of smudged print when it was sheer guesswork as to which finger it came from.

YET the connection was solid enough. It pointed to Kingsley.

Enough, thought Murdoch, to send out at least a "wanted-for-questioning" circular for Professor Kingsley. Too bad that fired bullets seldom have fingerprints on them.

Murdoch went back to the laboratory and took Captain Harris's fingerprint man with him. Dr. Holmes let them enter Kingsley's laboratory with a master key, and stood dumbfounded when he looked at the empty

room, shaking his head.

"It begins to add up," said Murdoch.

It was an hour before the fingerprint expert was finished. It took another hour to send them to Washington by telephoto, and another hour later an answer came to Walter Murdoch:

PRINTS DEFINITELY BLAIR, KINGSLEY, AND WOMAN SALLY RANSOME. PRINTS ON DIRTY DISHES MIRROR REPRODUCTIONS OF KINGSLEY AND RANSOME, NO BLAIR. CAN YOU GET PRINTS FROM CIGARETTE FOLDER?

TONY MONROE

"No," grumbled Murdoch. "That one was handled by too many people."

But Murdoch's belief that there was some connection between Blair and Kingsley was confirmed, as strange as it was. And within the next couple of hours, a general alarm was out for Joseph Kingsley, Sally Ransome, and Norman Blair wanted for suspicion of murder.

Meanwhile, the real criminals were rolling swiftly across the countryside in a stolen moving van with their loot. Another day of luck would see them at their hideout far from any city large enough to have more than the sketchiest of police departments. . . .

An instant after Joseph Kingsley saw the circle disappear, he began to look for a means of breaking his electrician's tape manacles. His hands were taped behind him so he could not use his teeth, and they were taped too high to permit him to pass his feet between them.

He inspected the room carefully. The walls and ceiling were of a satiny metal and the furniture seemed bulky and round-cornered. Light came from tightly shuttered windows and was inadequate. Kingsley found that by wriggling like an eel, he could move about the room slowly and painfully, and after inspecting each piece of furniture and finding it useless for breaking his bonds, he located a radio receiver.

He knew it could be used and his heart leaped. The front was smooth and clear of anything likely to be of use to him, but Kingsley knew that somewhere in the back would be something that could be used. He levered the radio from the wall, hoping it was not a model with a closed-in back.

It was not.

And then Kingsley levered the radio for-

ward on its face and eeled himself to a sitting position on the edge of the cabinet-rear, dangling his bound feet inside. He kicked against the largest of the several tubes and broke it with a loud pop.

Then he sat upon the floor and dangled his hands over the back. He located the brutally splintered glass of the tube that clung to the base where it was inserted in the socket. He cut his wrist twice before he succeeded in getting the edge of the tape against the sharp glass.

A minute later he was free.

He unwrapped his ankles and stood up. He looked around the place, trying the doors and windows. They were locked with a complex lock that couldn't be forced without tools of some sort. He did not know, but the place was a veritable fortress, built by Blair as a hideout and as a place for a final standoff if it came to a last ditch battle against Law and Order. And such a place, difficult to enter, was equally difficult to get out of when the owner desired to make it so.

Kingsley hammered on the walls to let Sally know that he was free and that she must not lose hope. His one intent was to break free and to get to some place where he could let the authorities know what was going on.

HE TOOK time to ponder the strangeness of reversal. He knew which was his right hand, and the mirror on the wall showed him to be right. He smoked with the correct hand and his coat was buttoned correctly. In his left hand pants pocket he found his keys just as they should be.

But a book on an end table read as it might read when viewed in a mirror, and the mirror proved to him that this was so. When he approached something it came as it was expected to, and as he walked a curved course things moved as they should. He had no trouble in getting around.

But he knew that the matter of position was a matter of relativity and that regardless of how he were reversed, a strange room would not seem stranger than normal. In his own apartment things would be reversed to him.

Though it was really true that he was reversed with respect to it, it is human nature to interpret things in relation to yourself. The driver's license and the papers in his wallet read properly to him, for they

had been reversed along with him. Only those things that had not been reversed seemed backward.

He could get along all right. But have someone ask him for his signature and he would be trapped, for he could not write backward—and other people would not accept a reversed signature. Besides, Kingsley was right-handed, and despite the fact that to his reversed senses he seemed normal, other people would see him as a southpaw.

CHAPTER VII

Hideout Fortress

FORGETTING the strangeness of it all, Kingsley began to think of some way to get out of this trap. The shuttered windows, he discovered, were of tool steel and near to being impregnable even with the best of equipment, let alone his bare hands. The doors were steel-faced and sturdy. Yet he reasoned that a door between rooms might be less firm than those leading outside, and he determined to try.

The cupboards that lined one end of the room were locked, and they resisted the battering of three wrecked floor lamps and one ruined chair before he gave up. The door at the end of the room seemed likely, since he could not open the cupboards to find something useful in breaking out, so he inspected the door and shrugged. He could do no more than try, and if he failed he would have tried, at least.

Kingsley tried the sofa, and found it too heavy for him to lift. The heavier chair was bulky and he staggered under its weight, but it took a staggering mass to give him hope. He started from the far end of the room and began moving forward with the chair on his shoulders. He increased his walk to an uncertain run. He stumbled at about eight feet from the door and his groaning curse rang out through the room as he pitched forward under the chair's weight.

But the stumble proved fortunate. It gave him a headlong velocity he could not have achieved had he merely rammed at the door, and the hurling chair hit the door with force enough to shatter the bolt. The door opened slightly, and Kingsley, muttering about fortune coming in strange ways to the

righteous, hurled the chair again but did not stumble this time. The weakened bolt gave way and Kingsley went into the next room on a headlong run.

This room was furnished as a combined kitchen and dining room, and Kingsley lost no time in drinking from a glass he found on the sink. Then he looked around.

There was something wrong with the setup, he knew, and he spent some time in trying to unravel the evidence presented, for there was some conflict that he could not, at first, determine. As in the case of the living room, cabinets and cupboards were locked. Dishes were neatly stowed in a glass-doored cabinet which was not locked.

There was a faint film of dust in the place.

The refrigerator motor started with a faint purr, and Kingsley opened it to see what was inside. It was stocked; not filled to the brim with neatly-stacked packages and dishes, but in the normal fashion.

Kingsley looked out of the kitchenette window upon a lake that glistened an unbroken blue through the trees. There was no sign of any other occupancy of the region from where Kingsley stood, but he knew that certain territories in the country were like that. A summer cabin could easily be located in such a manner as to be away and free of other people by mile after mile, or the next house might be only a couple of hundred feet through the woods.

The shutter on the kitchenette window gave him too limited a view. Kingsley could not tell which kind of sheer loneliness it was.

But as he tried to see more of the surface of the lake, he began to get the discrepancy. Here was a summer cabin on a lake, obviously miles from civilization. Locked and stowed as if abandoned for the season, but awaiting the arrival of its owners for the next season. But in contrast to this was the running water, the electricity, and the refrigerator stocked with food as though it had been used recently. The film of dust was that of a few days or at the most a week, but not that of month after month.

In spite of the locked and abandoned look of the place, someone had lived here recently.

The door in the kitchenette was open slightly and it showed stairs leading upwards into darkness. Kingsley opened the door the rest of the way and put his foot on the first step.

"Sally!" he called. She must be up here

somewhere, locked in some room.

There was no answer.

"Sally!"

He paused in doubt. Had that gangster hurt her?

"Sally!" he yelled.

Or had the crook kept her in Holland, and what was her fate?

KINGSLEY raced up the last few steps and burst into the room on the right.

It was empty but a faint perfume filled the room. It was furnished as a boudoir and it had been occupied by a very feminine woman. Here the evidences of recent occupancy were greater than downstairs. A pair of sheer nylons were folded on the dresser and a full complement of cosmetics were on the dressing table. The bed was made neatly, and a chenille robe was folded and laid across the bed.

On the lapel of the robe was an embroidered script-monogram, and Kingsley held it to the mirror to decipher it.

"'S. B. R.,'" he said, wondering.

He found a book on the bedside table and opened it to the flyleaf. The scrawl would have been hard to read if properly presented, and Kingsley had trouble in reading it through the mirror. This was partly due to the fact that he did not want to believe his eyes. The signature was:

Sally B. Ransome

He slid open the boudoir table drawer and found a small pile of letters. The top letter was a long, lengthy letter from a man in jail which went on in a sentimental tone that sounded false, somehow. Certain words and phrases were misused, and below these was the same bad scrawl as on the flyleaf. Connected, these annotations added up to the fact that Sally should investigate some rather weird happenings in Holland, Illinois, because they might prove interesting.

"Sally," he said in a dry voice.

So that was how the girl had happened to be so conveniently interested in the Fortean Society. And Sally Ransome must have used the teleport to get her man out of jail!

He found a chain of keys in the bottom drawer. The identification tag said "Norman Blair," which meant nothing to Kingsley but made him believe that Blair must be the man in question. He pocketed the keys and looked around, thinking.

There was no question as to his next move. He must get out of here quick and report to the authorities.

The keys worked, and within a minute Kingsley was outside and walking briskly up the narrow roadway that wound in and out of the trees. It was several miles long and in poor shape, but Kingsley went along the trail until he came to the main road.

Here he paused. Then because one way was as good as the other from his own standpoint, Kingsley turned left--knowing as he did that he was really turning right--and started up the main road.

He began to whistle cheerfully. For the first time since Blair had shown up, Kingsley was confident that he could handle the situation.

Kingsley had not gone far beyond the first curve when the moving van came up the road from the other direction and turned into the trail. It made heavy going through the narrow road, and it was almost an hour before Blair and Sally Ransome came to the house by the lake. Blair stopped the truck and turned to Sally.

"You'll have to be tied again, you know."

She nodded. "How long?"

"Long enough for Kingsley to be convinced of the necessity of putting this gear together."

"Okay. Then what?"

"Then it's into the cellar with him!"

Sally held her hands forward and Blair taped them loosely. Then he threw her over his shoulder and carried her to the door. From her handbag he took her keys and opened the door. He carried her in and dropped her on an easy chair, then he looked around.

"Hey!" he exploded.

He raced through the door to the kitchenette and stumbled over the battered easy chair. He swore, but then wasted no time in inspecting the rest of the house.

"He's escaped!" snapped Blair, untaping the girl.

"Escaped?"

"Gone. Come on, Sally. We've got work to do!"

She nodded. The thing to do was to set up the teleport as quickly as possible. How they would search for Joe Kingsley neither of them knew, but it must be done. And if Kingsley had really escaped and had the authorities out in full cry for them, what better way of escape was there than to walk

through the teleport to some distant place? It meant abandoning the thing, but if Kingsley were alive he could eventually be recaptured and tortured into reproducing the machine.

TOGETHER they carried the instruments into the house and put them in neat array in the cellar. Luckily for them Kingsley was a methodical man, for the various bits of equipment—the generators, the supplies, the driving components—were all more or less standard, or had been standard bits of electrical gear at one time, and they were equipped with standard input and output plugs which fit standard cables.

Had the gear been built as a unit the initial move would have been impossible. But as it was, each factor in the generation of the space field was produced by some small bit of equipment or a series of small pieces all cable-connected.

As Norman Blair carried the various cabinets into the cellar, Sally found the right cables and plugged them in. In two hours, Blair smiled wryly, held his breath, and snapped the main switch.

Obediently, the silver plate glistened translucently, then became transparent to show them a view of the forest outside.

"It works!" cheered Blair.

"Now we'll find Kingsley!"

Blair shook his head.

"First we replace that radio," he said sourly. "We've got to keep one ear out for the cops, and for any news broadcasts."

He manipulated the dials and sent the plane of view scurrying across the country to a large city. He held it high in the air until he located a store carrying a complete line of radio receivers, then entered the warehouse below the store. Here Blair removed three radio sets in their complete cartons before he turned the gear off.

He opened the sets and plugged them in. They worked, which surprised Blair a bit but would not have surprised a radio engineer. Giving it no more thought, Blair turned one of them to a short wave band that carried police calls from the nearest city, set the second radio to a station in the same city which played phonograph records twenty-four hours a day, and gave the latest news every half-hour. The third radio he did not tune, but left it running as a spare, just in case.

"Now," said Blair, "We will collect Joe

Kingsley." He sounded confident.

"But where?"

Blair smiled. "Just hope we're not too late," he said.

"But where?"

"Sally, if you were a law-abiding, peace-loving citizen and you were in the same kind of mess as Kingsley, where would you go?"

"To the police."

"Naturally. And since Kingsley went afoot, he'd get to the main road and go either left or right. There's one town about twelve miles up the road to the right, and one about fifteen miles down the road to the left. We'll take the right-hand road first."

CHAPTER VIII

A Scientist Disappears

KINGSLEY came to the outskirts of a small town. It would not be too long, now. He quickened his pace along the main street of town. He wanted to get this settled and finished so that he could return to work.

He stopped a man and asked where the police station was, and after getting directions, went to the station and entered boldly.

The man at the desk was scanning a sheet of paper that Kingsley could not see, so he waited a moment until the desk-sergeant finished.

The officer looked up and blinked.

He looked down to the paper again and frowned.

"Sergeant, I'm Joe Kingsley and I want to report—"

"So you are?"

"Yes."

"And what is it that you want to report?" Unseen, the officer's hand was pressing a button under the desk.

"I want to report a theft, an escaped criminal, and—"

The door behind the sergeant opened and three uniformed policemen came boiling out, their guns at ready.

"There he is!" snapped the sergeant.

"But what—"

"Up!" snapped the sergeant waving his hand.

Kingsley shook his head in disbelief. "But I want—"

The three officers split as they came around the desk. Kingsley looked into the muzzle of a Police Positive while the other two came at him from either side and took him by the arms.

They carried him backward, lifting him so that his feet scarcely touched the floor. He was forcibly dropped into a hard chair, his hands looped over the open arms, passed across his lap, and handcuffs snapped. Completely trapped, Kingsley looked at the sergeant with pained wonder in his face.

"But I'm Joe Kingsley."

"So you said. Doctor Joseph Kingsley, suspected of aiding a criminal escape from jail, theft of an automobile, and murder."

"Me?"

"You! Now where is he?"

"Where is who?"

"Your accomplice."

"I don't know, but he's on his way here —" Kingsley paused. "But he's no accomplice of mine."

"No? Make something else of this, then."

The sergeant held the handbill in front of Kingsley. It was a formal notice of his identity, his photograph, and the usual details of such handbills similar to those posted in police stations and post offices. In addition, there was another section appended which explained that in the case of Kingsley, there might be a discrepancy in the fingerprints, and gave a complete set of reversed prints as an alternative.

Beside that of Kingsley was a similar description of Norman Blair, and on the other side was one of Sally Ransome. A rather large reward was offered for any information leading to capture of any or all of the three.

"But this isn't true—"

"No? We'll take your prints and see whether you have left or right-hand prints." The sergeant took Kingsley's wallet and opened it. His brow furrowed. "Anybody got a mirror?" he asked, scowling.

"Why?" asked one of the officers.

"Everything in this wallet looks as if it had been passed through a mirror, like 'Alice Through the Looking Glass,'" he said. "If nothing else, Kingsley, this would be enough. How do you do it?"

"It's the teleport."

"The what?"

"Teleport. A means of teleportation."

"Yeah. I'm sure. A bit more of that double talk and you'll learn how to talk

easy," the sergeant threatened.

"But it is."

"Bah! Go on, bright guy."

"The teleport transmits objects through space by bringing two locations side by side in superspace. The trouble is that superspace—or space itself—is twisted as a Mobius Strip is twisted so that everything that goes through it comes out reversed."

"Forget it, chum. Boys, plant this guy in Cell Four. We'll save this for the F. B. I. This guy ain't saying a thing."

"I can tell you where Norman Blair is."

"Good. Where is he?"

NONE of them saw the faint shimmering circle because it came in through a window and was lost in the dust-speckled shaft of sunshine that slanted down toward the floor. It was there but a moment, then it slid downward into the floor edgewise, but tilting with its lower edge forward as if to come toward Joe Kingsley on a glide.

Below the surface of the floor it went. Its edge came up once halfway across the floor, then dipped downward again after Blair had caught his bearings.

"I'll have to show you," Kingsley said.

"Can't you tell us?"

"Yes, but remember that I'm reversed and every right-hand turn looks to me like a left-hand curve. We'd get all mixed up."

"Could you draw us a map?"

"Yes but—"

"Draw us a map and we'll look at it through a mirror."

"It'll be crude."

"Just give us an idea, that's all."

"I'll be more than glad to hel—"

Kingsley's offer of help was cut off by a yelp of fear. He and his chair and a three-foot circle of the floor dropped down and out of sight into a room that stood sideward from that hole in the floor.

The desk sergeant caught one glimpse of equipment, a man, and a woman apparently standing against a wall, and he saw Kingsley fall down from the police station, then take a curve below the floor, falling sideward against that strange wall.

The scene disappeared abruptly. The policemen were looking through the three-foot hole in the floor at the basement of the police station.

"The crooks who own that could steal anything!" The desk sergeant exploded.

He headed for the telephone quickly. . . .

"Well, how do you do?" sneered Blair, planting a kick against Joe Kingsley's sprawled form.

Kingsley was helpless, and all he could do was glare. Blair shrugged and stood the chair upright roughly.

"Take it easy," he said. Then a thought came to Blair. "Look, Kingsley, can't we make a deal?"

"Deal?" asked Kingsley.

"Yeah. This thing will make us rich quick. Maybe I could do something to make up for the rough way I've handled you, and we could throw in together."

Kingsley shook his head. "It's murder," he said.

"Murder's easy," said Blair callously. "And with this thing they'll never catch us."

"No? You might think differently."

Sally shrugged. "Money makes people think differently," she said. "Why not show him?"

"Did y'ever think of that?" sneered Blair. "Just watch!"

He manipulated the controls and sent the field of view flying across the country. He located the money vault of the Chase National Bank in New York and lifted package after package of currency from the vault, handing them to Sally, who stacked the packages neatly on a table near the wall.

Then Blair headed the field of view for Chicago, and in a similar fashion rifled the First National Bank. Next was the San Francisco branch of the Manhattan Trust Company.

"Money?" he laughed happily. "Or," he added seriously, "maybe jewelry."

Tiffany's vault appeared behind the circle and Blair waved Sally forward. She selected a ring and a necklace and strutted a bit when she put them on.

"Or maybe revenge," growled Blair angrily.

He found the State Prison and thickened the circle just behind the warden's head. Quickly he reached through and slammed a fist into the back of the warden's head. The warden dropped like a limp rag and Blair gloated a bit before he turned the teleport off.

"Anything you want," he told Kingsley.

JOE shook his head.

"Come on, fellow. We need you." Blair picked up a hand-ax and headed for

Kingsley. Joe shuddered, but Blair hit the chair arms and broke Kingsley free. "Now," he told Joe, "we both know how to get you out of those bracelets. We'll do it as soon as you decide to throw in with us. We need a technician to keep this thing in operation—or to build another one, larger and better."

"No," said Kingsley.

"Think it over, chum," said Blair. "You'll work for me willingly or not, you know."

"No."

Blair laughed ominously. He knew that Kingsley would, ultimately. . . .

Walter Murdoch was waiting for the airplane when it landed on the small field outside of Holland. He said hello to the pilot and climbed into the jet fighter and was borne into the sky with a swoosh. The plane streaked north at six hundred miles per hour while Murdoch called Monroe over the plane's radio.

"Hello, Tony. It begins to jell."

"I know, Walt. Keep it up. What's the latest?"

"About the same time you sent me the dope on the rifling of several banks and the abrupt disappearance of Kingsley from the police station, the plane arrived. I'm on my way to Little Superior, Wisconsin, right now."

"Need any help?"

"No. The local cops can handle it, I think. Besides, we have no time."

"Why?"

"Well, from the situations that we've managed to uncover, it seems as though Kingsley invented some gadget that can ship stuff from one spot to another instantly."

"Yes."

"Well, the way to catch a crook that can get around that fast isn't by frontal attack by a small army. We've got to do it by stealth."

"You're right. I just hope we can catch up with them."

"I'm trying, Tony. Better put the rest of the force on it too."

"I'll wait until you see what you can see in Little Superior. I'd rather not get the whole country excited about this thing. Remember, once this gadget gets known all over the world there'll be cause for international trouble. And we don't really know what it is, you know."

"That's right—but we'll find out," said

Walter Murdoch certainly.

He shut off the radio and the speech-scrambler, but he had an uncertain, queasy feeling that he could not be certain that Kingsley or Blair was not following his every word from some unseen place right in the jet fighter.

It was an hour and twenty minutes of jet flying from Holland, Illinois, to Little Superior, Wisconsin. And then Murdoch was in the police station talking to the sergeant who was still a bit pop-eyed over the absolutely incredible escape of the scientist.

"So he disappeared?"

"Right through that hole in the floor."

"Dropped right down?"

"Sort of down and sideward. Beneath there was a room that seemed to be standing on one end."

Murdoch thought for a moment. He nodded.

"There was a shiny circle?"

"Yes, it—well, from what little we saw, it went like this: First we knew was when Kingsley fell into a three-foot circle. Then we saw this sideward room, just like looking into the room from that circle in the floor. Next, the circle thickened, sort of, and the room faded from view abruptly. Next the circle—the hole in the floor—was silverlike. Then it disappeared and all we could see was the basement."

"That thing must have some sort of portal, a doorway-passage," said Murdoch. "Probably vertical on the machine itself. But the distant portal can be tilted or moved in any direction. Then if the distant portal were vertical, people in either of the places would view right through the circle and see the others in position relative to themselves. So Kingsley fell down, out of here, and the inertia of his fall carried him horizontal a bit into that other room, where the direction of gravity changed abruptly and he fell again downward, but which direction was at right angles to yours."

"Sounds right. But it looked almighty funny to see the man and woman standing against the wall surrounded by all sorts of gear."

"What kind of gear?"

The sergeant spread helpless hands.

"What can you tell in a split second of time, especially when you're completely boffed?"

Murdoch nodded. "Did you notice any-

thing at all about the stuff?"

"Mostly a gleam of dials and pilot lights."

"Now that's something," said Murdoch exultantly. "Pilot lights mean electricity. The thing must use electricity for power. Can we turn off all the current in the neighborhood and leave 'em stranded?"

"Might work," said the sergeant. "I can get the electric company to cooperate."

"Good. And meanwhile I'll start down the highway to see what I can see."

"Tell you what," said the desk sergeant. "We've got quite a bunch of forest rangers here. They're well-equipped with walky-talkies. I'll ask them to help, and we can near canvass the neighborhood. As soon as any of them sight something suspicious, they can call in and we'll collect the rest of them and see what we can do."

"Just find 'em," said Murdoch. "We don't want to scare 'em off. It's a ticklish proposition trying to locate and catch someone who can not only follow you unseen but can also be in Melbourne within the twinkle of an eye."

"Okay. You're running the show. And I'm glad of it."

CHAPTER IX

The Man Who Could Not Go Right

AFTER Blair and Sally Ransome had finished showing off what they could do with their stolen machine, Kingsley was taken upstairs. There had been a slight argument about the pile of money, Sally insisting that it be re-reversed at once, and Blair telling her that it would have to be shipped somewhere else sooner or later anyway, and that that would automatically re-reverse it and make it valid.

Meanwhile, Kingsley sat in an easy chair and looked around the room with interest. It was the same room he had been in before, but it looked so vitally different when re-reversed. He preferred it that way because he was used to it, although it was certain that he could learn to live left-handedly.

It would be quite a problem, learning to write from right to left with his left hand so that other people could read his writing, or he could write southpaw with his reversed right hand which was the more agile.

Yet he preferred not to go through years of relearning the physical habits of a lifetime, backward.

Blair continued to oversell Kingsley on the mutual benefits of joining, and Kingsley wanted no part of it.

Kingsley admitted the ease with which Blair had amassed a small fortune and at practically zero chance of being caught and with little effort. It would be so easy merely to live in some pleasant place far from authority and to bring to you all of the things that go toward making life pleasant.

It tickled his fancy. It would have tickled the fancy of any man, and it would have sent many an otherwise honest man along the trail of dishonesty because it was so simple and so safe.

Yet Kingsley knew that sooner or later the Law and Order side would catch up, or possess similar machines, and that would spell the end of the free take and have. A criminal using a teleport would soon be forced into the constant running that he was in now, for authority could follow and trail him with a similar or even improved model, once the possibility were known.

So Kingsley said "No!" and let it go at that while Blair shrugged, knowing that Kingsley would do as he was told or suffer the consequences.

Periodically during the evening, Blair fired up the equipment and watched the police stations in both small towns nearby. In each things were running as normal. The main offices of the Federal Bureau of Investigation were looked into, and found clear of any but minor details.

But while the game of business-as-normal was going on in official quarters to fool just such a spying operation, the forest rangers were combing the district carefully, and it was only ten o'clock in the evening when one of them found the stolen moving van in a small ravine not more than a mile from Blair's hideaway.

He found it because he was a forest man, and he knew that the trail of broken limbs and crushed twigs meant the passage of some large, hard body. The van was well-concealed, but not well enough concealed to hide it from the sight of a man standing before it with anger in his mind.

The forest ranger lifted his walky-talky and called to give the alarm.

A hundred men seeking the same thing heard, and they began to congregate. It

could take hours, but they moved silently through the woods and in the dark, walking boldly because they knew their forests. Along the highway came Walter Murdoch in a borrowed automobile, to pause at the local electric distribution station.

He dropped one officer and went on to within a mile of Blair's summer cottage hideout. There he met the others and explained the situation to them. Then, as everything was clear, Murdoch took charge.

He called the distributing station, and the attendant pulled the main switch.

Every light in the district went out. . . .

BLAIR swore. He looked a bit worried, but arose from the sofa where he had been reading idly and went to the cellar where he worked by hurricane lamp to service an auxiliary power plant. With the auxiliary plant running, the lights came on again, but Blair was still worried.

He fired up the teleport and the lights dimmed.

"What gives?" he demanded of Kingsley.

"That gear takes a lot of power. You haven't got the capacity in that auxiliary."

Blair swore again and tried the teleport, sending the plane of view down the road toward the power distribution system. It entered, and he saw the policeman and the attendant beside the open power switch.

Blair cursed. His hand hit the switch that thickened the connection so that teleportation would be possible—and the lights dimmed while the auxiliary power plant groaned with the unaccustomed load. There came the pungent odor of too-hot electrical machinery and as Blair snarled, he reached forward but hit the silver plate with his hand. "Not enough!" he gritted.

He whirled the plane of view back along the road angrily until he caught sight of the approaching body of men. They had spread out in a vast circle and were closing in on the house.

"Let's get out of here!" exclaimed Sally.

"Not on foot," grunted Blair.

A fuse blew in the auxiliary equipment.

Blair swore again, and replaced it. The men were inside of the plane of view by the time it was reestablished again. Blair forgot them for the moment and sought over the neighborhood for some means of escape. On foot he would never make it, and so long as the main source of power was off he could go no further than perhaps a mile

without blowing fuses. Even so, the auxiliary was groaning and straining and the odor of burning insulation filled the cellar.

Then from the trees that surrounded the house came a burst of flame. It led across the clearing like a sword of light and it hit the house and burned its way through the metal wall. It erupted in the living room with a shattering crash and a welter of living flame. "Bazookas!" snarled Blair.

He cranked the dial frantically to return the plane of view. From a cabinet he took a rifle and loaded it. He found a bazooka carrier and took a bead on him through the teleport. He snapped the switch, the plate opened long enough for Blair to fire.

He did not see the result because the auxiliary generator blew another fuse.

Swearing luridly, Blair went over to the machine and wired across the fuses with heavy copper strips. He returned to the machine, knowing that it was a matter of time before they blew him to bits. Another bazooka shell roared across the clearing and tore the kitchenette to shreds above their heads. Then Blair found the automobile that Walter Murdoch had used, and laughed with sardonic confidence.

Another bazooka shell hit the upper part of the house. Apparently the attackers believed them to be upstairs.

"Hurry!" breathed Sally.

Blair nodded. He turned and grabbed Kingsley by the manacled wrists and dragged him toward the teleport.

Blair materialized the teleport just outside of Murdoch's car and handed Sally through first. She held the rifle there while Kingsley was shoved through and Sally held Joe at bay until Blair came through to stand beside her. Blair leaned back into the circle.

"Hurry!" cried Sally again.

Blair nodded, ran around the car and jumped into the driver's seat. He started off down the road at a high speed just as the open face of the teleport erupted flame and a terrible roar that blew forward out of the hole in space for fifty feet, cutting down trees and scorching the very earth before it.

THEN the circle was cut off abruptly, but the roaring flame of the dynamited hideaway still pillared a mile into the sky.

"That," gritted Blair coldly, "will take care of most of them! They won't find enough to do 'em any good. What's left of them, that is. But," he added with a sour

chuckle, "we've got the guy himself—and he'll build another one!"

They went down the road at a high rate of speed, away from the wreckage they left behind them. Blair grunted unhappily, and Sally, from the far side of Kingsley from Blair asked: "It is hard driving?"

"Not too bad. Something you can get used to. Just a matter of using the left foot for gas and brakes and the right foot for the clutch. And staying on the wrong side of the road."

The car was mounting a hill now, and going at a terrific pace. Far behind them, men were bandaging themselves and calling for aid to quench the forest fire that had been started by the exploding dynamite. Blair had made good his escape.

They came to the top of the hill and began to round a curve, Sally looked back at the flames mounting high in the distance.

"Nice fire," she commented.

Blair took a quick glance behind him and smiled grimly. And Joe Kingsley, with a sudden convulsive movement, shouted:

"Look out—car coming!"

With the instinct born of years of driving, Norman Blair yanked the wheel to the right.

But it was *his* right, and instead of hugging the inside of the road where there was a bit of cliff the car lurched, roared across the road, and hit the restraining fence with a splintering crash. Down the side of the hill rocketed the car. It hit a boulder and bounced. End over end it turned, then it slewed sideward and rolled to the bottom where it came to rest with all four wheels in the air.

Kingsley, cushioned between Sally and Blair, came to consciousness first.

They found him in the cold gray of dawn, sitting between a cursing woman and a groaning man, clumsily but effectively tied with strips of cloth torn from Blair's shirt.

"What happened?" asked Murdoch.

Kingsley explained, and as he finished, Murdoch got the handcuff keys from the desk sergeant and freed the scientist.

"But how did you accomplish this?" he asked, pointing at the wrecked car.

"Blair messed everything up for everybody," said Kingsley, with a bitter laugh. "We were teleported to the car, which reversed us left to right. I'll have to build another machine to get back to normal again. But Blair," he finished cheerfully, "never did anything *right* in all his life!"



Billy stared as Jenks fell back against the corridor wall

A Child Is Crying

By **JOHN D. MacDONALD**

*Scientists cringe in terror
as a small boy leads them
to a glimpse of the future!*

HIS mother, who was brought to New York with him, said, at the press conference, "Billy is a very bright boy. There isn't anything else we can teach him."

The school teacher, back in Albuquerque,

shuddered delicately, looking at the distant stars, her head on the broad shoulder of the manual training teacher. She said, "I'm sorry, Joe, if I talk about him too much. It seems as if everywhere I go and everything I do, I can feel those eyes of his watching me."

Bain, the notorious pseudo-psychiatrist, wrote an article loaded with clichés in which he said, "Obviously the child is a mutation. It remains to be seen whether or not his

peculiar talents are inheritable." Bain mentioned the proximity of Billy's birthplace to atomic experimentation.

Emanuel Gardensteen was enticed out of his New Jersey study where he was putting on paper his newest theories in symbolic logic and mathematical physics. Gardensteen spent five hours in a locked room with Billy. At the end of the interview Gardensteen emerged, biting his thin lips. He returned to New Jersey, locked his house, and took a job as a section hand repairing track on the Pennsy Railroad. He refused to make a statement to the press.

John Folmer spent four days getting permission to go ninety feet down the corridor of the Pentagon Building to talk to a man who was entitled to wear five stars on his uniform.

"Sit down, Folmer," the general said. "All this is slightly irregular."

"It's an irregular situation," Folmer retorted. "I couldn't trust Garrity and Hoskins to relay my idea to you in its original form."

The lean little man behind the mammoth desk licked his lips slowly. "You infer that my subordinates are either stupid or self-seeking?"

Folmer lit a cigarette, keeping his movements slow and unhurried. He grinned at the little gray man. "Sir, suppose you let me tell you what I'm thinking, and after you have the story, then you can assess any blame you feel is due."

"Go ahead."

"You have read about Billy Massner, General?"

THE gray man snorted. "Read about him! I've read about him, listened to newscasts about him, watched his monstrous little face in the newsreels. The devil with him! A confounded freak."

"But is he?" Folmer queried, his eyes fixed on the general's face.

"What do you mean, Folmer. Get to the point."

"Certainly. It is of no interest to you or to me, General, to determine the reason for the kid's talents. What do we know about those talents? Just this. The kid could read and write and carry on a conversation when he was thirteen months old. At two and a half he was doing quadratic equations. At four, completely on his own, he worked out theories regarding non-Euclidian geometry and theories of relativity that parallel the

work of Einstein. Now he is seven. You read the Beach Report after the psychologists got through with him. He can carry a conversation on mathematical concepts right on over the heads of our best men who have given their life to such things.

"The thing that happened to Gardensteen is an example. The Beach Report states that William Massner, age 7, is the most completely rational being ever tested. The factor of imagination is so small as not to respond to any known test. The kid gets his results by taking known and observed data and extrapolating from that point, proving his theories by exhaustive cross checks."

"So what, Folmer? So what?" the general snapped.

"What is our weapon of war, General? The top weapon?" Folmer asked meaningfully.

"The atom bomb, of course!"

"And the atom bomb was made possible by the work of physicists in the realm of pure theory. The men who made the first bomb compare to Billy Massner the way you and I compare to those men."

"What are you getting at?" The general's tone showed curiosity and a little uneasiness.

"Just this, General. Billy Massner is a national resource. He is our primary weapon of offense and defense. As soon as our enemy realize what we have in this kid, I have a hunch they'll have him killed. Inside that head of his is our success in the war that's coming up one of these days."

The general placed his small hard palm on a yellow octagonal pencil and rolled it back and forth on the surface of his huge desk. The wrinkles between his eyebrows deepened. He said gently, "Folmer, I'm sort of out of my depth on this atomic business. To me it's just a new explosive—more effective than those in use up to this time."

"And it will be continually improved," Folmer asserted. "You know what a very small portion of the available energy is released right now. I'll bet you this kid can point out the way to release all the potential energy."

"Why haven't you talked this over with the head physicist?"

"But I have! He sneered at the kid at first. I managed to get him an interview with Billy. Now he's on my side. He's too impressed to be envious. The kid fed him a production shortcut."

The general shrugged in a tired way. "What do we have to do?"

"I've talked to the boy's mother and last week I flew out and saw the father. They only pretend to love the kid. He isn't exactly the sort of person you can love. They'll be willing to let me adopt him. They'll sign him over. It will cost enough dough out of the special fund to give them a life income of a thousand a month."

"And then what?" the general wanted to know.

"The kid is rational. I explain to him what we want. If he does what we want him to do, he gets anything in the world *he* wants. Simple."

The general straightened his shoulders. "Okay, Folmer," he snapped. "Get under way. And make sure this monster of yours is protected until we can get him behind wire."

Folmer stood up and smiled. "I took the liberty of putting a guard on him, sir."

"Good work! I'll be available to iron out any trouble you run into. I'll have a copy disc of this conversation cut for your file. . . ."

IN SPITE of the general's choice of words, William Massner was not a monster. He was slightly smaller than average for his age, fine-boned and with dark hair and fair skin. His knuckles had the usual grubby childhood look about them. At casual glance he seemed a normal, decent-looking youngster. The difference was in the absolute immobility of his face. His eyes were gray and level. He had never been known, since the age of six months, to show fear, anger, surprise or joy.

After the brief ten minutes in court, John Folmer brought Billy Massner to his hotel room. Folmer sat on the bed and Billy sat on a chair by the windows. John Folmer was a slightly florid man of thirty, with pale thinning hair and a soft bulge at the waistline. His hands were pink and well-kept. Though he had conducted all manner of odd negotiations with the confidence of an imaginative and thorough-going bureaucrat, the quiet gray-eyed child gave him a feeling of awe.

"Bill," he said, "are you disappointed in your parents for signing you away?"

"I made them uncomfortable. Their affection was a pretense. It was an obvious move for them to trade me for financial security." The boy's voice had the flat precision of a slide rule.

Folmer tried to smile warmly. "Well, Bill,

at least the sideshow is over. We've gotten you away from all the publicity agents. You must have been getting sick of that."

"If you hadn't stopped it, I would have," the boy stated.

Folmer stared. "How would you do that?"

"I have observed average children. I would become an average child. They would no longer be interested."

"You could fake possessing their mentality?"

"It wouldn't be difficult," the boy said. "At the present time I am faking an intelligence level as much lower than my true level as the deviation between a normal child and the level I am faking."

Folmer uncomfortably avoided the level gray eyes. He said heartily, "We'll admit you're pretty . . . unusual, Bill. All the head doctors have been trying to find out why and how. But nobody has ever asked you for your opinion. Why are you such a . . . deviation from the norm, Bill?"

The boy looked at him for several motionless seconds. "There is nothing to be gained by giving you that information, Folmer."

Folmer stood up and walked over to the boy. He glared down at him, his arm half lifted. "Don't get snippy with me, you little freak!"

The level gray eyes met his. Folmer took three jerky steps backward and sat down awkwardly on the bed. "How did you do that?" he gasped.

"I suggested it to you."

"But—"

"I could just as well have suggested that you open the window and step out." And the child added tonelessly, "We're on the twenty-first floor."

Folmer got out a cigarette with shaking hands and lit it, sucking the smoke deep into his lungs. He tried to laugh. "Then why didn't you?"

"I don't like unnecessary effort. I have made a series of time-rhythm extrapolations. Even though you are an unimportant man, your death now would upset the rhythm of one of the current inevitabilities, changing the end result. With your death I would be forced to isolate once again all variables and re-establish the new time-rhythm to determine one segment of the future."

Folmer's eyes bulged. "You can tell what will happen in the future?"

"Of course. A variation of the statement

that the end pre-exists in the means. The future pre-exists in the present, with all variables subject to their own cyclical rhythm."

"And my going out the window would change the future?"

"One segment of it," the boy replied.

Folmer's hands shook. He looked down at them. "Do—do you know when I'm supposed to die?"

"If I tell you, the fact of your knowledge will make as serious an upset in time-rhythm as the fact of your stepping out the window. Your probable future actions would be conditioned by your knowledge."

Folmer smiled tightly. "You're hedging. You don't know the future."

"You called me up here to tell me that we are taking a plane today or tomorrow to a secret research laboratory in Texas. We will take that plane. In Texas the head physicist at the laboratory will set up a morning conference system whereby each staff member will bring current research problems to a roundtable meeting. I will answer the questions they put to me. No more than that. I will not indicate any original line of research, even though I will be asked to do so."

"And why not?"

"For the same reason that you are not now dead on the pavement two hundred feet below that window. Any interference with time-rhythm means laborious re-calculations. Since by a process of extrapolation I can determine the future, my efforts would be conditioned by my knowledge of that future."

FOLMER tried to keep his voice steady as he asked, "You could foresee military attacks?"

"Of course," the child said.

"Do you know of any?"

"I do."

"You will advise us of them so that we can prepare, so that we can strike first?" In spite of himself Folmer sounded eager.

"I will not." . . .

Folmer took William Massner to Texas. They landed at San Antonio where an army light plane took them a hundred miles northwest to the underground laboratories of the government where able men kept themselves from the thinking of the probable results of their work. They were keen and sensitive men, the best that the civilized world had yet produced—but they worked with death, with

the musty odor of the grave like a gentle touch against their lips. And they didn't stop to think. It was impossible to think of consequences. Think of the job at hand. Think of CM. Think in terms of unbelievable temperatures, of the grotesque silhouette of a man baked into the asphalt of Hiroshima. . . .

Billy was given a private suite, his needs attended to by two WAC corporals who had been given extensive security checks. The two girls were frightened of the small boy. They were frightened because he spent one full hour each day doing a series of odd physical exercises which he had worked out for himself. But that didn't frighten them as much as the fact that during the rest of his free time he sat absolutely motionless in a chair, his eyes half closed, gazing at a blank wall a few feet in front of him. At times he seemed to be watching something, some image against the flat white wall.

Folmer was unable to sleep. He didn't eat properly. He had told no one of his talk with Billy at the New York hotel. His knowledge ate at him. As his cheeks sagged and turned sallow, as his plump body seemed to wither, the fear in his eyes became deeper and more set.

The research staff made more progress during the first month of roundtable meetings than they had during the entire previous year. The younger men went about with an air of excitement thinly covered by a rigid control. The older men seemed to sink more deeply into fortified battlements of the mind. William Massner's slow and deliberate answers to involved questions resulted in the scrapping of two complete lines of research and a tremendous spurt of progress in other lines.

Folmer could not forget the attack which Billy had spoken of and, moreover, could not forget the fact that Billy knew when the attack would occur. As Folmer lay rigid and unsleeping during the long hours of night, he felt that the silver snouts of mighty rockets were screaming through the stratosphere, arching and falling toward him, reaching out to explode each separate molecule of his body into a hot whiteness.

On the twenty-third of October, after William Massner had been at the Research Center for almost seven weeks, Folmer, made bold by stiff drinks, sought out Burton Janks, the Security Control Officer. They went together to a small soundproofed storeroom

and closed the door behind them. Janks was a slim, tanned man with pale milky eyes, dry brown hair and muscular hands. He listened to Folmer's story without any change in expression.

When Folmer had finished, Janks said, "I'm turning you over to Robertson for a psycho."

"Don't be a fool, Burt! Give me a chance to prove it first!" Folmer pleaded.

"Prove that nonsense! How?"

"Will you grant that if any part of my story is true, all of it is true?"

Janks shrugged. "Sure."

"Then do this one thing, Burt. The kid'll be coming out of conference in about ten minutes. He'll go along the big corridor and take the elevator up to his apartment level. Meet him in the corridor, walk up to him and pretend that you are going to slap him. Your guards will be with you. You're the only man who could try such a thing and get away with it."

Janks stretched lazily. "I'd enjoy batting the little jerk's ears back. Maybe I won't pretend."

Ten minutes later Janks stood beside Folmer. They leaned against the wall of the corridor. The door at the end opened and Billy came out, closely followed by the two young guards who were always with him whenever he was out of his apartment. Billy walked slowly and steadily, no expression on his small-boy face, no glint of light in his ancient gray eyes.

JANKS said, "Here goes," and walked out to intercept them. He nodded at the guards, drew one hand back as though to strike the boy. For a second Janks stood motionless. Then he went backward with odd, wooden steps, his back slamming against the corridor wall with a force that nearly knocked him off his feet. Billy stared at him for a moment without expression before continuing toward his apartment. The two guards stood with their mouths open, staring at Janks, and then hurried to their proper position a few feet behind William Massner.

Janks was pale. He looked toward the small figure of Billy, turned to Folmer and said, "Come on. We'll report to W. W. Gates."

Gates was an unhappy man. He had been a reasonably competent physicist, blessed with a charming personality and an ability to handle administrative details. As a con-

sequence, he was no longer permitted to do research, but had become the buffer between the military and the research staff. His nominal position was head of research, but his time was spent on reports in quadruplicate and in soothing the battered sensibilities of the research staff. Gates loved his profession and continually told himself that he was helping it more by staying out of it. His rationalization didn't make him feel any better. He looked like a bald John L. Lewis without the eyebrows. And without the voice. Gates talked in a plaintive squeak.

He sat very still and listened while Folmer told the complete story and Janks substantiated it. Little beads of sweat appeared on Gates' upper lip in spite of the air conditioning.

He said slowly, "If I had never sat in on the conferences, I wouldn't believe it. Science has believed that the future is the result of an infinite progression of possibilities and probabilities with a factor of complete randomness. If you quoted him properly, Folmer, this time-rhythm he spoke of indicates some kind of a pattern in the randomness, so that if you can isolate all the possibilities and probabilities and determine the past rhythm, you can extend that pattern. It's sort of a statistical approach to metaphysics and quite beyond our current science. I wish you hadn't told me."

"I've got an idea, sir," Folmer said. Both men looked at him. "I've spent a long time watching the kid. This reading the future is okay for big stuff, but little things fool him. Once he stumbled and fell against a door. Another time one of the men accidentally tramped on his foot. It hurt the kid."

"What does that mean?" Janks said.

"It means that the kid can avoid big stuff if he wants to, but not minor accidents. I don't think we can carry this much further. The three of us right here are carrying the ball. It's up to us. The future is locked up in the kid's mind. Now, here's what we do. . . ."

Corporal Alice Dentre was nervous. She knew that she had to forget her personal fears and carry out her orders. An order was an order, wasn't it? She was in the army, wasn't she? After all, her superiors must know what they're doing.

She aimlessly dusted the furniture and glanced toward the chair where William Massner sat motionless, staring at a blank wall. Her lips were tight, and little droplets

of cold sweat trickled down her body. She moved constantly closer to the boy. Five feet from him, she reached into her blouse pocket and pulled out the hypodermic. It slid easily out of the aseptic plastic case. Quickly she held it up to the light, depressed the plunger until a drop of the clear liquid appeared at at the needle tip.

A few feet closer. Now she could reach out and touch him. He didn't move. She held herself very still, the needle poised. A quick thrust. The boy jumped as the needle slid through the fabric of his sleeve and penetrated the smooth skin. She pushed the plunger before he twisted away. She backed across the room, dropping the hypodermic. It glistened against the thick pile of the rug. She stood with her back against the door. Billy tried to stand, but slumped back. In a few seconds his chin dropped on his chest, and he began to snore softly.

She glanced at her watch. With a trembling hand she unlocked the door. Gates, Janks and Folmer came in quickly and quietly. With them was Dr. Badloe from the infirmary. He carried a small black case. Janks nodded at Alice Dentre. She slipped out into the corridor and walked quickly away, her shoulders squared. Behind her she heard the click of the lock on the steel door.

AS THE results of the first drug went away, Billy was given small increments of a derivative of scopolamine. They had turned his chair around, loosened his clothing. Only one light shone in the apartment. It was directed at his face. Dr. Badloe sat near him, fingers on the boy's pulse. Janks, Gates and Folmer stood just outside the circle of light.

"He's ready now," Badloe said. "Just one of you ask the questions."

Both Janks and Folmer looked at Gates. He nodded. In his thin, high voice he said, "Billy, is it true that you can read the future?"

The small lips twitched. In a small, sleepy voice Billy said, "Yes. Not every aspect of the future. Merely those segments of it which interest me. The method is subject to a standard margin of error."

"Can you explain that margin of error?" Gates asked.

"Yes. One segment of the future concerns my relationship with this organization. My study of the future indicated that Folmer, knowing my ability to read the future, would

interest others and that a successful attempt would be made to render me powerless to keep my readings to myself."

The three men stared at each other in sudden shock. Gates, with a quaver in his voice said, "Then you knew that we would—do this thing?"

"Yes."

"Why didn't you anticipate it and avoid it?"

"To do so would have been to alter the future," the sleepy voice responded.

"Are you a mutation caused by atomic radiation?"

"No."

"What are you?"

"A direct evolutionary product. There are precedents in history. The man who devised the bow and arrow is a case in point. He was necessary to humanity because otherwise humanity would not have survived. He was more capable than his fellows." The boy's droning voice halted.

"Are we to assume then that your existence is necessary to the survival of humanity?" Gates questioned.

"Yes. The factor missing from man's intellect is the ability to read the future. To do so requires a more lucid mind than has hitherto existed. The use of atomic energy makes a knowledge of the future indispensable to survival. Thus evolution has provided humanity with a new species of man able to anticipate the results of his own actions."

"Will we be attacked?"

"Of course. And you will counterattack again and again. As a result of this plan of yours, you hope to be able to attack first, but your military won't credit my ability to see into the future."

"When will the attack come?" Gates prodded.

"No less than forty, not more than fifty-two days from today. Minor variables that cannot be properly estimated give that margin for error."

"Who will win?"

"Win? There will be no victory. That is the essential point. In the past the wars between city states ceased because the city states became too small as social units in a shrinking world. Today a country is too small a social unit. This war will be the terminal point for inter-country warfare, as it will dissolve all financial, linguistic and religious barriers."

"What will the population of the world

be when this war is over?" was Gates' next question.

"Between fifty and a hundred and fifty millions. There will be an additional fifty per cent shrinkage due to disease before population begins to climb again."

There was silence in the darkened room. The boy sat motionless, awaiting the next query. Badloe had taken his fingers from the boy's pulse and sat with his face in his hands.

GATES said slowly, "I don't understand. You spoke as though your type of individual has come into the world as an evolutionary answer to atomics. If this war will happen, in what sense are you saving mankind?"

"My influence is zero at this point," was the boy's answer. "I will be ready when the war is over. I will survive it, because I can anticipate the precautions to be taken. After it is over the ability to read the future will keep mankind from branching off into a repetition of militarism and fear. I have no part in this conflict."

"But you have improved our techniques!" Gates protested.

"I have increased your ability to destroy," Billy corrected him. "Were I to increase it further, you would be enabled to make the earth completely uninhabitable."

"Then your work is through?"

"Obviously. The result of the drug you have administered to me will be to impair the use of my intellect. I will be sent away. My abilities will return in sufficient time to enable me to survive."

Gates' voice became a whisper. "Are there others like you?"

"I estimate that there are at least twenty in the world today. Obviously many have managed to conceal their gifts. The oldest should be not more than nine. They are

scattered all over the earth. They all have an excellent chance of survival. Thirty years from now there will be more than a thousand of us."

Gates glanced over at Janks, saw the fear and the obvious question. Folmer had the same expression on his face. With a voice that had in it a small touch of madness, Gates said, "What is the future of those of us in this room? Will we survive?"

"I have not explored the related probabilities. I knew in New York that it was necessary for Folmer to survive to bring me here and to tell you of my abilities. It can be calculated."

"Now?"

"Give me thirty seconds."

Again the room was silent. Badloe had lifted his face, his eyes naked with fear. Janks shifted uneasily. Folmer stood, barely breathing. Gates twisted his fingers together. The seconds ticked by. Four men waited for the word of death or life.

Billy Massner licked his lips. "Not one of you will live more than three months from this date." It was a flat, calm statement. Badloe made a sound in his throat.

"He's crazy!" Janks snarled.

They wanted to believe Janks. They had to believe the boy.

Gates whispered, "How will we die?"

They watched the small-boy face. Slowly the impassivity of it melted away. The gray eyes opened and they were not the dead gray eyes the men had grown accustomed to. They were the frightened eyes of boyhood. There was fear on the small face. Fear and indecision.

The voice had lost its flat and deadly calm.

"Who are you?" the boy asked, close to tears. "What do you want? What are you doing to me? I want to go home!"

In the darkened room four men stood and watched a small boy cry.

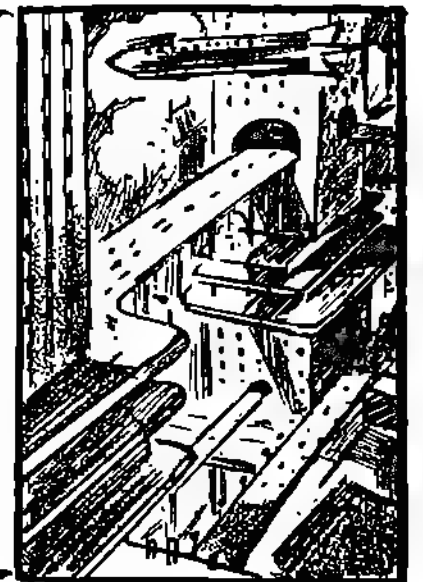
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KNOCK *by Fredric Brown*



*The last man on Earth
sat alone in a room. . . .*

THERE is a sweet little horror story that is only two sentences long:

"The last man on Earth sat alone in a room. There was a knock on the door. . . ."

Two sentences and an ellipsis of three dots. The horror, of course, isn't in the two sentences at all; it's in the ellipsis, the implication: *what* knocked at the door? Faced with the unknown, the human mind supplies something vaguely horrible.

But it wasn't horrible, really.

The last man on Earth—or in the universe, for that matter—*sat alone in a room.*

It was a rather peculiar room. He'd just noticed how peculiar it was and he'd been studying out the reason for its peculiarity. His conclusion didn't horrify him, but it annoyed him.

Walter Phelan, who had been associate professor of anthropology at Nathan University up until the time two days ago when Nathan University had ceased to exist, was not a man who horrified easily. Not that Walter Phelan was a heroic figure, by any wild stretch of the imagination. He was slight of stature and mild of disposition. He wasn't much to look at, and he knew it.

Not that his appearance worried him now. Right now, in fact, there wasn't much feeling in him. Abstractedly, he knew that two days ago, within the space of an hour, the human race had been destroyed, except for him and, somewhere, a woman—one woman. And that was a fact which didn't concern Walter Phelan in the slightest degree. He'd probably never see her and didn't care too much if he didn't.

Women just hadn't been a factor in Walter's life since Martha had died a year and a half ago. Not that Martha hadn't been a good wife—albeit a bit on the bossy side. Yes, he'd loved Martha, in a deep, quiet way. He was only forty now, and he'd been only thirty-eight when Martha had died, but—well—he just hadn't thought about women since then. His life had been his books, the ones he read and the ones he wrote. Now there wasn't any point in writing books, but he had the rest of his life to spend in reading them.

True, company would be nice, but he'd get along without it. Maybe after a while, he'd get so he'd enjoy the occasional company of one of the Zan, although that was a bit difficult to imagine. Their thinking was so alien to his that there seemed no common ground for discussion, intelligent though they were, in a way.

An ant is intelligent, in a way, but no man ever established communication with an ant. He thought of the Zan, somehow, as super-ants, although they didn't look like ants, and he had a hunch that the Zan regarded the human race as the human race had regarded ordinary ants. Certainly what they'd done to Earth had been what men did to ant hills—and it had been done much more efficiently.

BUT they had given him plenty of books. They'd been nice about that, as soon as he had told them what he wanted, and he had told them that the moment he had learned that he was destined to spend the rest of his life alone in this room. The rest of his life, or as the Zan had quaintly expressed it, for-ev-er. Even a brilliant mind—and the Zan obviously had brilliant minds—has its idiosyncracies. The Zan had learned to speak Terrestrial English in a matter of hours but they persisted in separating syllables. But we digress.

There was a knock on the door.

You've got it all now, except the three dots, the ellipsis, and I'm going to fill that in

and show you that it wasn't horrible at all.

Walter Phelan called out, "Come in," and the door opened. It was, of course, only a Zan. It looked exactly like the other Zan; if there was any way of telling one of them from another, Walter hadn't found it. It was about four feet tall and it looked like nothing on earth—nothing, that is, that had been on Earth until the Zan came there.

Walter said, "Hello, George." When he'd learned that none of them had names he decided to call them all George, and the Zan didn't seem to mind.

This one said, "Hel-lo, Wal-ter." That was ritual; the knock on the door and the greetings. Walter waited.

"Point one," said the Zan. "You will please hence-forth sit with your chair turned the other way."

Walter said, "I thought so, George. That plain wall is transparent from the other side, isn't it?"

"It is trans-par-ent."

"Just what I thought. I'm in a zoo. Right?"

"That is right."

Walter sighed. "I knew it. That plain, blank wall, without a single piece of furniture against it. And made of something different from the other walls. If I persist in sitting with my back to it, what then? You will kill me?—I ask hopefully."

"We will take a-way your books."

"You've got me there, George. All right, I'll face the other way when I sit and read. How many other animals besides me are in this zoo of yours?"

"Two hun-dred and six-teen."

Walter shook his head. "Not complete, George. Even a bush league zoo can beat that—*could* beat that, I mean, if there were any bush league zoos left. Did you just pick at random?"

"Ran-dom sam-ples, yes. All species would have been too man-y. Male and female each of one hun-dred and eight kinds."

"What do you feed them? The carnivorous ones, I mean."

"We make food. Syn-thet-ic."

"Smart," said Walter. "And the flora? You got a collection of that, too?"

"Flo-ra was not hurt by vi-bra-tions. It is all still grow-ing."

"Nice for the flora," said Walter. "You weren't as hard on it, then, as you were on the fauna. Well, George, you started out with 'point one.' I deduce there is a point

two kicking around somewhere. What is it?"

"Some-thing we do not un-der-stand. Two of the oth-er a-ni-mals sleep and do not wake? They are cold."

"It happens in the best regulated zoos, George," Walter Phelan said. "Probably not a thing wrong with them except that they're dead."

"Dead? That means stopped. But nothing stopped them. Each was a-lone."

Walter stared at the Zan. "Do you mean, George, you don't know what natural death is?"

"Death is when a be-ing is killed, stopped from liv-ing."

Walter Phelan blinked. "How old are you, George?" he asked.

"Six-teen—you would not know the word. Your pla-net went a-round your sun a-bout sev-en thou-sand times. I am still young."

Walter whistled softly. "A babe in arms," he said. He thought hard a moment. "Look, George," he said, "you've got something to learn about this planet you're on. There's a guy here who doesn't hang around where you come from. An old man with a beard and a scythe and an hour-glass. Your vibrations didn't kill him."

"What is he?"

"Call him the Grim Reaper, George. Old Man Death. Our people and animals live until somebody—Old Man Death—stops them ticking."

"He stopped the two crea-tures? He will stop more?"

WALTER opened his mouth to answer, and then closed it again. Something in the Zan's voice indicated that there would be a worried frown on his face, if he had had a face recognizable as such.

"How about taking me to these animals who won't wake up?" Walter asked. "Is that against the rules?"

"Come," said the Zan.

That had been the afternoon of the second day. It was the next morning that the Zan came back, several of them. They began to move Walter Phelan's books and furniture. When they'd finished that, they moved him. He found himself in a much larger room a hundred yards away.

He sat and waited and this time, too, when there was a knock on the door, he knew what was coming and politely stood up. A Zan opened the door and stood aside. A

woman entered.

Walter bowed slightly. "Walter Phelan," he said, "in case George didn't tell you my name. George tries to be polite, but he doesn't know all of our ways."

The woman seemed calm; he was glad to notice that. She said, "My name is Grace Evans, Mr. Phelan. What's this all about? Why did they bring me here?"

Walter was studying her as she talked. She was tall, fully as tall as he, and well-proportioned. She looked to be somewhere in her early thirties, about the age Martha had been. She had the same calm confidence about her that he'd always liked about Martha, even though it had contrasted with his own easy-going informality. In fact, he thought she looked quite a bit like Martha.

"I think I know why they brought you here, but let's go back a bit," he said. "Do you know just what has happened otherwise?"

"You mean that they've—killed everyone?"

"Yes. Please sit down. You know how they accomplished it?"

She sank into a comfortable chair nearby. "No," she said, "I don't know just how. Not that it matters, does it?"

"Not a lot. But here's the story—what I know of it, from getting one of them to talk, and from piecing things together. There isn't a great number of them—here, anyway. I don't know how numerous a race they are where they came from and I don't know where that is, but I'd guess it's outside the Solar System. You've seen the space ship they came in?"

"Yes. It's as big as a mountain."

"Almost. Well, it has equipment for emitting some sort of a vibration—they call it that, in our language, but I imagine it's more like a radio wave than a sound vibration—that destroys all animal life. It—the ship itself—is insulated against the vibration. I don't know whether its range is big enough to kill off the whole planet at once, or whether they flew in circles around the earth, sending out the vibratory waves. But it killed everybody and everything instantly and, I hope, painlessly. The only reason we, and the other two-hundred-odd animals in this zoo, weren't killed was because we were inside the ship. We'd been picked up as specimens. You do know this is a zoo, don't you?"

"I—I suspected it."

"The front walls are transparent from the outside. The Zan were pretty clever at fixing up the inside of each cubicle to match the natural habitat of the creature it contains. These cubicles, such as the one we're in, are of plastic, and they've got a machine that makes one in about ten minutes. If Earth had had a machine and a process like that, there wouldn't have been any housing shortage. Well, there isn't any housing shortage now, anyway. And I imagine that the human race—specifically you and I—can stop worrying about the A-bomb and the next war. The Zan certainly solved a lot of problems for us."

GRACE EVANS smiled faintly. "Another case where the operation was successful, but the patient died. Things *were* in an awful mess. Do you remember being captured? I don't. I went to sleep one night and woke up in a cage on the space ship."

"I don't remember either," Walter said. "My hunch is that they used the vibratory waves at low intensity first, just enough to knock us all out. Then they cruised around, picking up samples more or less at random for their zoo. After they had as many as they wanted, or as many as they had space in the ship to hold, they turned on the juice all the way. And that was that. It wasn't until yesterday they knew they'd made a mistake and had underestimated us. They thought we were immortal, as they are."

"That we were—what?"

"They can be killed, but they don't know what natural death is. They didn't, anyway, until yesterday. Two of us died yesterday."

"Two of— Oh!"

"Yes, two of us animals in their zoo. One was a snake and one was a duck. Two species gone irrevocably. And by the Zan's way of figuring time, the remaining member of each species is going to live only a few minutes, anyway. They figured they had permanent specimens."

"You mean they didn't realize what short-lived creatures we are?"

"That's right," Walter said. "One of them is young at seven thousand years, he told me. They're bi-sexual themselves, incidentally, but they probably breed once every ten thousand years or thereabouts. When they learned yesterday how ridiculously short a life expectancy we terrestrial animals have, they were probably shocked to the core—if they have cores. At any rate

they decided to reorganize their zoo—two by two instead of one by one. They figure we'll last longer collectively if not individually."

"Oh!" Grace Evans stood up, and there was a faint flush on her face. "If you think— If they think—" She turned toward the door.

"It'll be locked," Walter Phelan said calmly. "But don't worry. Maybe they think, but I *don't* think. You needn't even tell me you wouldn't have me if I was the last man on Earth; it would be corny under the circumstances."

"But are they going to keep us locked up together in this one little room?"

"It isn't so little; we'll get by. I can sleep quite comfortably in one of these overstuffed chairs. And don't think I don't agree with you perfectly, my dear. All personal considerations aside, the least favor we can do the human race is to let it end with us and not be perpetuated for exhibition in a zoo."

She said "Thank you," almost inaudibly, and the flush receded from her cheeks. There was anger in her eyes, but Walter knew that it wasn't anger at him. With her eyes sparkling like that, she looked a lot like Martha, he thought.

He smiled at her and said, "Otherwise—"

She started out of her chair, and for an instant he thought she was going to come over and slap him. Then she sank back wearily. "If you were a *man*, you'd be thinking of some way to— They can be killed, you said?" Her voice was bitter.

"The Zan? Oh, certainly. I've been studying them. They look horribly different from us, but I think they have about the same metabolism we have, the same type of circulatory system, and probably the same type of digestive system. I think that anything that would kill one of us would kill one of them."

"But you said—"

"Oh, there are differences, of course. Whatever factor it is in man that ages him, they don't have. Or else they have some gland that man doesn't have, something that renews cells."

SHE had forgotten her anger now. She leaned forward eagerly. She said, "I think that's right. And I don't think they feel pain."

"I was hoping that. But what makes you think so, my dear?"

"I stretched a piece of wire that I found in the desk on my cubicle across the door so my Zan would fall over it. He did, and the wire cut his leg."

"Did he bleed red?"

"Yes, but it didn't seem to annoy him. He didn't get mad about it; didn't even mention it. When he came back the next time, a few hours later, the cut was gone. Well, almost gone. I could see just enough of a trace of it to be sure it was the same Zan."

Walter Phelan nodded slowly.

"He wouldn't get angry, of course," he said. "They're emotionless. Maybe, if we killed one, they wouldn't even punish us. But it wouldn't do any good. They'd just give us our food through a trap door and treat us as men would have treated a zoo animal that had killed a keeper. They'd just see that he didn't have a crack at any more keepers."

"How many of them are there?" she asked.

"About two hundred, I think, in this particular space ship. But undoubtedly there are many more where they came from. I have a hunch this is just an advance guard, sent to clear off this planet and make it safe for Zan occupancy."

"They did a good—"

THERE was a knock at the door, and Walter Phelan called out, "Come in."

A Zan stood in the doorway.

"Hello, George," said Walter.

"Hel-lo, Wal-ter," said the Zan.

It may or may not have been the same Zan, but it was always the same ritual.

"What's on your mind?" Walter asked.

"An-oth-er crea-ture sleeps and will not wake. A small fur-ry one called a wea-sel."

Walter shrugged.

"It happens, George. Old Man Death. I told you about him."

"And worse. A Zan has died. This morning."

"Is that worse?" Walter looked at him blandly. "Well, George, you'll have to get used to it, if you're going to stay around here."

The Zan said nothing. It stood there.

Finally Walter said, "Well?"

"A-bout wea-sel. You ad-vice same?"

Walter shrugged again. "Probably won't do any good. But sure, why not?"

The Zan left.

Walter could hear his footsteps dying

away outside. He grinned. "It might work, Martha," he said.

"Mar— My name is Grace, Mr. Phelan. What might work?"

"My name is Walter, Grace. You might as well get used to it. You know, Grace, you do remind me a lot of Martha. She was my wife. She died a couple of years ago."

"I'm sorry," said Grace. "But what might work? What were you talking about to the Zan?"

"We'll know tomorrow," Walter said. And she couldn't get another word out of him.

That was the fourth day of the stay of the Zan.

The next was the last.

It was nearly noon when one of the Zan came. After the ritual, he stood in the doorway, looking more alien than ever. It would be interesting to describe him for you, but there aren't words.

He said, "We go. Our coun-cil met and de-cid-ed."

"Another of you died?"

"Last night. This is pla-net of death."

Walter nodded. "You did your share. You're leaving two hundred and thirteen creatures alive, out of quite a few billion. Don't hurry back."

"Is there an-y-thing we can do?"

"Yes. You can hurry. And you can leave our door unlocked, but not the others. We'll take care of the others."

Something clicked on the door; the Zan left.

Grace Evans was standing, her eyes shining.

She asked, "What—? How—?"

"Wait," cautioned Walter. "Let's hear them blast off. It's a sound I want to remember."

The sound came within minutes, and Walter Phelan, realizing how rigidly he'd been holding himself, relaxed in his chair.

"There was a snake in the Garden of Eden, too, Grace, and it got us in trouble," he said musingly. "But this one made up for it. I mean the mate of the snake that died day before yesterday. It was a rattlesnake."

"You mean it killed the two Zan who died? But—"

Walter nodded. "They were babes in the woods here. When they took me to look at the first creatures who 'were asleep and wouldn't wake up,' and I saw that one of

them was a rattler, I had an idea, Grace. Just maybe, I thought, poison creatures were a development peculiar to Earth and the Zan wouldn't know about them. And, too, maybe their metabolism was enough like ours so that the poison would kill them. Anyway, I had nothing to lose trying. And both maybes turned out to be right."

"How did you get the snake to—"

Walter Phelan grinned. He said, "I told them what affection was. They didn't know. They were interested, I found, in preserving the remaining one of each species as long as possible, to study the picture and record it before it died. I told them it would die immediately because of the loss of its mate, unless it had affection and petting—constantly. I showed them how with the duck. Luckily it was a tame one, and I held it against my chest and petted it a while to show them. Then I let them take over with it—and the rattlesnake."

H E STOOD up and stretched, and then sat down again more comfortably.

"Well, we've got a world to plan," he said. "We'll have to let the animals out of the ark, and that will take some thinking and deciding. The herbivorous wild ones we can let go right away. The domestic ones, we'll do better to keep and take charge of; we'll need them. But the carnivora—

Well, we'll have to decide. But I'm afraid it's got to be thumbs down."

He looked at her. "And the human race. We've got to make a decision about that. A pretty important one."

Her face was getting a little pink again, as it had yesterday; she sat rigidly in her chair.

"No!" she said.

He didn't seem to have heard her. "It's been a nice race, even if nobody won it," he said. "It'll be starting over again now, and it may go backward for a while until it gets its breath, but we can gather books for it and keep most of its knowledge intact, the important things anyway. We can—"

He broke off as she got up and started for the door. Just the way his Martha would have acted, he thought, back in the days when he was courting her, before they were married.

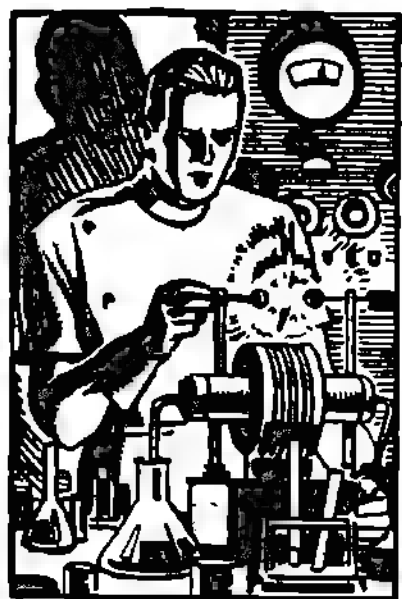
He said, "Think it over, my dear, and take your time. But come back."

The door slammed. He sat waiting, thinking out all the things there were to do, once he started, but in no hurry to start them; and after a while he heard her hesitant footsteps coming back.

He smiled a little. See? It wasn't horrible, really.

The last man on Earth sat alone in a room. There was a knock on the door. . .

High School Alchemist



SCIENTISTS, from the days of alchemy on, have occasionally and with the aid of many different elaborate devices managed to drag from sea water some tiny drams of the gold it contains. However, it has generally been rated a task too tedious and difficult to be worth all the time and effort that it requires.

But recently 17-year-old George Camamis, a New Brunswick, New Jersey, high school senior, decided to have a crack at it himself. He added hydorchloric acid to several gallons of sea water and then put in a gram of barium chloride.

After allowing a precipitate to form he poured off the water. First neutralizing this water with sodium hydroxide and another pinch of barium chloride, he repeated the process, collected the second precipitate, washed it with distilled water and dried it.

After heating it with lead and borax, he crushed the resultant glass bead and, using mercury to form an amalgam, evaporated the mercury and found his gold—coating the inside of his crucible.

Gold, once again, is where you find it!—*Carter Sprague.*

Across illimitable parsecs of space come the glowing ones in quest of

FUZZY HEAD



Through the window he saw a radiant man and woman sweeping across the lawn

WE ARRIVED in the golden autumn. We drove up through the russet leaves to the great house and descended lightly to the dew-drenched earth.

Celia darted on ahead of me, her pale body a diaphanous flowing. I moved more slowly, my thoughts like muted chimes as I

pondered the meaning of what had happened within the high, dark walls of the house.

For the first time on Earth a human child had been born who could summon us! He was eight years old now, but wise beyond his years and he had summoned us deliberately across space. He had sat, hunched and

By FRANK BELKNAP LONG

shivering, in his own small room, staring up at the far-flung constellations. Then, abruptly, he had thrown out his arms and called to us.

Celia could scarcely believe it even now. She had always wanted a child of her own, but we had despaired of ever finding one.

Then this call, this unbelievable summons! A sudden warmth and beauty, a child's laughter rippling through space. Spanning aeons, crossing dark barriers, as miraculous as the birth of a sun in utter blackness.

Celia had turned, and was staring back at me. She was shivering. Swiftly I darted to her side and took her burning hands in mine.

"Do not be afraid," I said. "He needs us as much as we need him. Like calls to like, you know!"

"Are you sure?"

"I'm positive. He used the *111th* formula!"

"But how did he get out of his space? How did he know we would come if he called?" Celia's body was burning brightly now. Her eyes were veiled and her lips had opened like the petals of a flower.

"The very different ones would know," I said. "Johnny was never quite human and now—"

"Now he's ready?"

"Yes!"

* * * * *

The little boy turned and looked at his mother. He had a strangely peaked face, the forehead inclined to broadness, the eyes wide and piercing and very blue.

"Johnny, what are you doing up here all alone in the dark? We've been looking everywhere for you! You didn't touch your supper. What's the matter, darling? What's wrong?"

"I wasn't hungry!" he said.

"And last night you didn't sleep! You tossed and twisted— Oh, Johnny!"

THE WOMAN fell to her knees beside her son and drew him into her arms. She ran her fingers through his hair.

"You're not well, Johnny!"

"Go away!"

Johnny wriggled out of his mother's embrace and ran to the window. He stood looking up at the pale stars, his lips quivering.

"Why don't they come?" he said in choked tones. Tears welled in his eyes, ran down his cheeks. "I can't stand living here any longer! They must come! They *must*!"

Downstairs in the library Johnny's father knocked the dottle from his pipe and walked to the window. It was a clear, star speckled night, and the dew-drenched grass seemed to breathe an air of freshness into the room.

Stephen Ambler's mind went back across the years.

He saw again the terrible, mushrooming shape of flame, so bright that, when he shut his eyes, it stabbed through his eyelids into his brain.

Shutting his eyes high above Bikini Atoll, hearing only the drone of his own plane, he had truly believed that the little primitive minds of men had wrought a miracle.

But no miracle could compare with the one that he had wrought one year later—the bright, incredible miracle of Johnny!

His memory grew sharper. In his mind's gaze he was walking with Johnny along a shining beach, the curving pink shells of the sea at his feet.

Johnny was staring at the white surf curving back. Johnny was in the autumn of his sixth year, his clear, childish eyes bright with excitement. Johnny stood staring at the surf and the wheeling gulls, and a horse-shoe crab half buried in the sand. Johnny kept tugging and pointing.

"The waves are tired, Daddy! The waves are falling back and dying! They don't want to come in!"

"Johnny, whatever gave you such an idea? The sea is restless and full of energy. It's big—so big that it covers four-fifths of the globe. Or is it two-thirds? Anyhow, it goes on and on. You needn't believe me. Ask any oceanographer!"

"No, Daddy! It's dying. So are you and Mommy, and Uncle Henry and Aunt Katie! And everybody! But I'm not! I'm new—and I'll never die!"

Yes, Johnny was new. But so were all children. It seemed incredible that Johnny could be so aware of the strong, bright flood of life in himself. The strength of childhood could make even the sea seem old and tired, perhaps. But what other little boy of six could express the inexpressible with the self-conscious artistry of a Dali?

A child's imagination could be winged and white and fearful. You could no more curb it than you could clamp a bit on Pegasus. But behind Johnny's unwashed ears were murmurs stranger than any heard in a sea shell.

The miracle of Johnny!

The door opened and Johnny's mother came into the library.

"Stephen, I've got to talk to you! It's about Johnny."

Johnny's father turned slowly, the wonder of Johnny in retrospect bowing to a slightly older Johnny in the flesh. Memory fell away, and reality took its place, so that Stephen was no longer smiling when he met his wife's troubled gaze.

"Well, what is it? Is Johnny still sulking?"

Helen Ambler nodded. Stephen noticed that she stood very still and that her hands were tightly clenched.

"Stephen, I'm worried! He says the strangest things!"

"Does he now? What, for instance?"

"That people are coming for him. Total strangers. Coming to take him away from us."

"He's living in a world of fantasy," Stephen said, scowling. "All children do, more or less."

"Stephen, it isn't only that. He keeps talking to Fuzzy Head, making a confidant of Fuzzy Head. When I go to him he pushes me away. But nothing's too good for that ridiculous doll. It's horrible, but I've got to say it, Stephen. Johnny's developing a *fixation*!"

"You mean a psychiatrist would call it a fixation," Stephen said, a trifle impatiently. "They put everything in neat, dustless packages, lock the closet door and throw away the key. But we're not putting Johnny in a dark closet."

STEPHEN stuffed tobacco in his pipe and searched in his pocket for a match. He couldn't find one.

"Johnny's a member of a family group, sure," he went on. "But he's also a very eager little boy starting out on a great adventure. It's natural for a child to stop at odd crossways and ask advice. Fuzzy Head just happens to be standing at an important crossroad in Johnny's life."

"But he's had that doll for seven years now, Stephen! You said yourself it was sissified for a boy of eight to play with dolls. You never did. Have you changed your mind?"

"No . . . I'm not too happy about that," Stephen admitted. "Every father wants his son to be a real he-guy. But you've got to

remember that Fuzzy Head isn't a baby doll. He's a little old man doll, more of a character toy than a doll."

"I see. And do you approve of the way Fuzzy Head's developing Johnny's character?"

"Johnny *has* character!" Stephen retorted. "That's the important thing. Do you want our son to be a rubber stamp?"

"Naturally not. But a two-headed calf would have character too. A great deal of character!"

Stephen was shocked. That the mother of his son should be capable of drawing such a parallel—and deriving emotional satisfaction from it—seemed incredible, almost monstrous, to him. What he failed to realize was the depth of his wife's capacity for self-torment and the strength of her desire to jolt him out of his complacency.

As he stared at her, aghast, she said an even more shocking thing: "Sometimes I think Johnny's not even human. He can be as cold and distant as one of those little clay figures made by African witch doctors!"

Her face grew suddenly anguished. "Stephen, if I didn't *love* him so—"

Stephen's features softened. He put his arm about his wife and gave her an affectionate squeeze. To clear the air he said jestingly: "Well, now, maybe you've hit on something. He was born a year after Bikini and—I was there!"

Helen Ambler stared at her husband, her eyes widening. "Stephen, what do you mean?"

He had not thought that she would take him seriously. In his anxiety to reassure her he made the mistake of taking too much for granted. He knew that she despised the imaginative stories of interplanetary travel, atomic power and future science that he liked to read and ponder.

So he made the mistake of assuming that, if he gave those stories their due, and a little more than their due, her antagonism would become a shield, insulating and protecting her.

"You have a psychological block, but you can overcome it," he said. "Next time you dust my books look inside the ones you're always putting back upside down. They contain a master plan for changing the genes of human inheritance."

"A master plan?"

Stephen nodded. "The brightest crop of

post-Wellsian imaginative science writers are convinced that if you bombard one, or both parents of a child, with atomic radiations well in advance of the event you're likely to get a little stranger in the house. A mutant child who isn't quite human. And, if you want to be morbid about it—a gnome, of a sort. A small weird guest!"

"Stephen!"

"Oh, so far it's never happened, except to fruit flies. But I was pretty close to Bikini Atoll. I was flying high in a plane the Navy supplied without realizing what they might be letting me in for. I was a bachelor then, of course."

He smiled. "Some of my favorite authors believe that kids like our Johnny belong to another race entirely. They're *born* human or almost human, but they grow out of it. Super-kids who grow up to become multi-dimensional, all shining cubes and bright impossible angles. They're only human in the caterpillar stage of their development."

Johnny's mother gasped wildly. "How can you even *think* such things! Horrible!"

AT THIS, Stephen made one last heroic attempt to convince his wife that he had spoken with his tongue in his cheek. "The Hindus believe that man was made by Prajapati, after many efforts in which the experimental beings did not harmonize with their environment. Maybe somebody like Prajapati is trying to make a race of super-beings, and our Johnny's just an experiment."

Helen Ambler did not smile.

Stephen's lips tightened and all the levity ebbed from his stare. "You asked me how I can think such things. I don't think them. But you do, subconsciously. Helen, listen to me. All kids become little strangers at times. If their parents love them, it doesn't matter. Just being a child is a frightful nervous strain on the child itself. Think back to your own childhood. When you first read the story of the Gorgons, with their snaky hair and brazen claws, how did you feel?"

Helen looked at him. "Like screaming!" she said.

"You see? A child identifies itself with its fantasy life with a terrible inward intensity. And it grows cold and distant when an adult tries to break in on that life. A child puts a part of itself into everything—its playthings, its toys; in fact, there's almost a phys-

ical transference, as though ectoplasm flowed out of the child and into its books and toys!"

"So you believe in ectoplasm now!"

"You know better than that!"

"Do I?"

"Please, dear! Let's not quarrel." . . .

Upstairs in his own small room Johnny picked up Fuzzy Head. Fuzzy Head was older than Johnny. Fuzzy Head was ten years young, a medium-sized walking and talking doll with a wooden trunk, metal limbs and a plaster-of-Paris face. Modern, functional dolls are fearfully and wonderfully made, but old-fashioned dolls speak the language of childhood, of dark, unexplored attics, hidden jam pots, and calico-draped dressmaking dummies as slim as mother used to be.

Some children prefer them.

Fuzzy Head was a hybrid—a Second World War priority doll, a product of scarcity and dread, made in that fluttering heartbeat of time between Oak Ridge and Bikini.

Put the bright side outward. There are still children in the world. Paint his cheeks and give him a chubby look. Make his eyes glitter like agates won by a clever little boy in a game of marbles.

Fuzzy Head wasn't beautiful, though. He was far too peculiar to seem attractive to anyone except Johnny. He had survived thumpings and poundings, the infinite unrest of the very young, the petulance and dark rancours of Johnny's early infancy.

His head was still covered with fuzzy locks. Hence his nickname, given to him by Johnny in the privacy of night, by a light that never was on sea or land.

Every effort had been put forth to make Fuzzy Head look rosy-cheeked, and wholesome, but actually he looked like a little old man, a malign *frop* out of Lilliput.

What's a *frop*? Johnny knew—but he wasn't telling.

Johnny picked up Fuzzy Head and set him down in a dark corner. Johnny knelt on the floor in front of Fuzzy Head.

"Glow, Fuzzy Head!" Johnny whispered.

It seemed to Johnny that Fuzzy Head lighted up. Johnny was quite calm about it.

"When will they come for me, Fuzzy Head?"

It seemed to Johnny that the doll screwed up its face and refused to answer.

"If you don't tell me I'll make you *Illth* the *Illth*!" Johnny warned.

Fuzzy Head remained silent.

The ritual was not a difficult one. Johnny had performed it before, though it was hard on Fuzzy Head. The ritual tore and wrenched at Fuzzy Head, shaking the doll to its vitals.

"*Illth!*" Johnny commanded.

It seemed to Johnny that Fuzzy Head turned a complete somersault in the air, very slowly, glowing brightly, and with a look of anguish on his face.

"*Illth the Illth!*" Johnny whispered.

Fuzzy Head seemed to shrivel a little. Johnny opened his mouth and shut it again. Fuzzy Head was turning inside out as he shriveled.

Metal parts came into view and glowed with a dull, eerie radiance. Fuzzy Head's insides. Wires and a voice box—but all *outside* of Fuzzy Head now. There were no broken surfaces.

Fuzzy Head had turned inside out without seeming to do so!

Johnny had turned rubber balls inside out in the same way. He had made rubber balls, and clocks *illth* the *illth*, just to prove to himself how easy it was. Never a cat—because Johnny wasn't cruel.

Fuzzy Head couldn't feel any flesh-and-blood pain, or really understand what was happening to him.

Fuzzy Head was now—reversed.

"Tell me!" Johnny intoned. "Tell me! Tell me! *Tell me!*"

Out of the doll came speech. High and shrill, like a whistle being squeezed.

"They are here now! They are crossing the lawn!"

With a little sob of pure rapture, Johnny scrambled to his feet. Almost, in his wild excitement, he forgot to unscramble Fuzzy Head. The doll screeched piteously. There was a *wrongness* about it that would have sickened an adult, a wrongness as hideous as misapplied surgery, or an unbroken egg, turned bad and spilling its yolk in some unguessable fashion. A look of tender compassion, odd in a child, came into Johnny's face.

"Poor Fuzzy Head! I forgot!"

Turning swiftly, Johnny waved his hand over the doll, intoning a few curious words. "*Sil Unsilith Undroth!*"

Slowly, still glowing dully, Fuzzy Head returned to his normal state.

A moment later Johnny was standing with

his face pressed to the window, his heart thumping wildly.

He could see them clearly now—a man and a woman, radiant in flowing garments, sweeping straight across the lawn toward the house. Their faces were strange, like petalled flowers but much brighter than the flowers which Johnny could make glow in the dark.

Their feet, Johnny noticed, were tipped with little fluttering wings of flame. He'd always known they would come for him, as far back as he could remember, and he could remember the first fluttering of his heart. He could remember himself red and angry, flushed with resentment because he was so very small and helpless and everyone ignored his wailing protests.

The man and the woman were rising now. Straight up toward the window, their faces shining in the moonlight.

Johnny exhaled a deep breath and stepped back from the window. At almost the same instant they were in the room with him!

Johnny tried to be calm, pretending he'd known all along that they were his true parents. But suddenly fierce emotion overcame him. He choked, flushed and threw his arm across his face to conceal the way he felt.

"Hello, Johnny!" a bell-like voice said.

"We've come to take you home, Johnny!" a second voice chimed.

It seemed to Johnny that he could be happy dying at once, but he knew that he would be even happier when they took him away to live with them forever.

SLOWLY Johnny uncovered his eyes and looked at his new parents.

It would not have been easy for an ordinary little boy to stare steadily into the blazing face of the sun, and Johnny was staring at two suns, equally bright.

But Johnny was not an ordinary little boy. Although he did not know it, his own face was, briefly, a sun.

For a moment it seemed to Johnny that the room was filled with—the others. A wheel of fire that kept spinning as he stared, with a great gray face in the middle of the glowing spokes. A big Easter egg on stilts, with its dry mouth hanging open, and its little beady eyes twinkling with merriment.

An animal that wasn't quite a rabbit. It was furry and bob-tailed, but its head kept swimming out of focus. When Johnny stared

very hard the rabbit's head became a glowing prism, mirroring all the colors of the rainbow.

There were *gilths*, too—thin and dark and hairy, with burning glass eyes, and dull fire balls, pulsing.

Suddenly Johnny remembered Fuzzy Head.

He turned and walked back into the room. He knew that his new parents were watching him but he didn't want to talk about Fuzzy Head. He just wanted to *keep* Fuzzy Head, and he was suddenly trembling in every limb.

Between suns there are no secrets. Thoughts are open, and blaze from mind to mind.

Johnny knew, and the thought was pure torment, that his new parents didn't want him to keep Fuzzy Head. No, that wasn't quite true. They wanted him to keep Fuzzy Head, but they were telling him that he couldn't.

Johnny stooped and picked Fuzzy Head up. He tucked the doll under his arm, and returned to where his parents were standing.

"No, Johnny!" The words came chiming-ly. "You can't take that doll with you. He's *grooved* too deeply into human space. Human hands made him, Johnny. He's just an ugly thought-pattern made of drift material. He's *solid*, Johnny. You're not!"

Sweat came out on Johnny's face and froze to his face. A silent cold seemed to bite through him.

"We know how you feel, Johnny! You're still a little human boy in some respects, but you can break out now if you try. You're old enough and wise enough. If you take our hands and walk with us, you'll cease to be human."

"And Fuzzy Head?"

"Johnny, a doll can't walk with the more-than-human. No, Johnny! *Sorry!*"

A look of stricken horror had come into Johnny's face. He had never before realized how much Fuzzy Head meant to him.

"No, I—I *won't!*" he stammered.

"You won't what Johnny?"

"Go away and leave him! Everybody says he's ugly! But he's mine, just like I was his father. Good father's don't desert their sons."

It was an adult statement, but Johnny sometimes surprised himself by the things he could say.

The radiant man seemed surprised too.

"But Johnny, he's just a wooden doll. Johnny, think! You can play with the *lililis!* The stars are not so bright. When you stretch out your arms and repeat the *Illth* formula you're not even Johnny. Not Johnny at all!"

"I don't want to be not Johnny—without Fuzzy Head!"

"But we are your parents now, Johnny!"

"Not without Fuzzy Head. I'm Fuzzy Head's father!"

Suddenly Johnny burst into tears. The radiant man and woman exchanged lightning-swift glances. Then, in utter silence, they darted into shadows. They whispered together.

"I never expected this, Celia. He isn't mature yet. A doll means more to him than we do."

"But he doesn't belong here. He belongs with us. We're his real parents now."

"Not yet, Celia. He's still too much of a child, not quite human, but immature. In fact, except at rare moments, he still *looks* human. Have you noticed?"

"Yes, naturally. But when he looks at us he changes. If we took him away now, he'd alter still more."

"Celia, think back. When you were very young and played with dolls."

"They were never human toys."

"No. But you were never human, Celia. Fuzzy Head isn't a human doll now. Johnny changed him by playing with him!"

"What do you mean?"

"Once Fuzzy Head was just a wooden doll in a toy shop on earth. But Johnny poured a part of *himself* into Fuzzy Head. A child always does that. Even when a human child puts itself into its fantasy life there's almost a physical transference. And Johnny could do it *better* than a human child!"

"You mean?"

"We can't take Johnny now. When he learns to put aside childish things, he'll be ready to go with us, but not before. He'll have to detach himself from Fuzzy Head first. If *we* did the detaching, something rather dreadful might happen to Johnny. There would be—a *tearing!*"

"Oh, *don't!* That's horrible!"

"Yes. You see, Celia, Fuzzy Head is still too much a part of Johnny. You might almost say flesh of Johnny's flesh and bone of Johnny's bone!"

"But some day we'll have Johnny?"

"Of course. But he'll have to stay here

with Fuzzy Head and his human parents until he grows more mature. In ten—twelve years perhaps. Human years. They pass swiftly.”

THERE was a sudden, pulsing brightness in the shadows.

As Johnny stared, a tight, hard lump in his throat, it swirled around the radiant man and woman and lifted them into the air. It touched Johnny too for an instant, almost caressingly. Then it dimmed and vanished.

As the shadows came rushing back Johnny gripped Fuzzy Head fiercely and held him close.

“I’ll never leave you!” he sobbed. “You’re mine, forever and ever. When I have to punish you, it hurts me, too! Awfully, Fuzzy Head!”

Hot tears stung the corners of Johnny’s eyes.

“I’m going to stay here with you, Fuzzy Head! I love you most—but Pops is all right, too, I guess!”

Mom wasn’t so bad either, he conceded after a moment of calm thought. The calmness had come slowly, brightening all about him like sunlight after rain. Johnny felt happy and relieved. Also, he was as sleepy as a bewhiskered tomcat that had overstayed its leave on the back fence.

Johnny’s father opened the door of Johnny’s room and stared in at his son.

Johnny was sleeping with one small arm thrown across Fuzzy Head and a peaceful look on his face. There was a curious wetness on Johnny’s eyelashes, as though he’d just returned from a walk in the garden, through the dewy darkness, with moist clover and elfin cobwebs under his feet.

Had Johnny been crying?

Stephen smiled tenderly and a little incredulously. Then, slowly, his lips tightened and he shook his head.

It had to be done! He wasn’t going to have Johnny grow up with a doll complex. It had gone on too long already.

Cautiously Stephen bent and disentangled the doll from his son’s embrace. His hands shook a little. He hoped that Johnny *wouldn’t* wake up. But even if Johnny awoke and sat up straight, his eyes bright and accusing in the pulsing gloom, Fuzzy Head’s fate would remain grimly sealed.

Fuzzy Head was about to go on a trip through the dark, silent house. Along the

hall and downstairs into the cellar, helpless in the clutches of a very determined father.

Johnny did not even stir in his sleep.

There was nothing but pitch blackness in the hall outside Johnny’s room. Stephen hurried along the hall, and down two flights of stairs with Fuzzy Head securely cradled in the crook of his right arm.

“This is the pay-off, little man!” he whispered fiercely.

The instant Stephen reached the cellar he shifted Fuzzy Head to his left arm, holding him upside down. He had to have his right arm free to get the furnace door open.

The furnace was raging brightly on a strong updraft—Stephen had seen to that well in advance.

Through the grated door a red inferno was visible.

The raging redness was not confined to the furnace, however. It filled the entire cellar with its flickering, as though a little corner of Hades had been moved into the house for the sole purpose of getting rid of Fuzzy Head.

Stephen did not waste a single heartbeat regretting his decision. He moved swiftly and decisively, tightening his grip on the doll and wrenching at the furnace door with his free hand.

As the fiery portal swung open a blast of heated air smote him full in the face, almost suffocating him. But he did not recoil. Instead, he drew closer to the fiery pit, despite the blistering heat, and raised Fuzzy Head up until the doll was poised above the flames at just the right angle, like a coffin in a crematorium.

“Burn and wither, little man!”

STEPHEN knew that he spoke to the doll but he had no clear recollection of moving his arm. Yet he must have done so, for suddenly as he stared the doll seemed to slip from his clasp and shoot forward—straight forward into the high-leaping flames.

From somewhere upstairs there came a piercing shriek.

Sweat broke out on Stephen’s palms when he saw that he was still holding the doll.

Sometimes the urge to perform an act can be so strong, the need so urgent, that the imagination becomes like a pair of white-hot tongs, overheated, and capable of flattening reality to a thin edge of blackness on an anvil without substance. The mind leaps

ahead of the act, and it seems to happen—with a terrible clarity.

Stephen hadn't thrown Fuzzy Head into the flames.

Thank heavens! What a fool a man was to think that destiny was a single strand that could be twisted around the finger. In the immense complexity of a child's inner life were multitudinous cross-currents. A parent had no right to be ruthless and make hasty decisions.

Fuzzy Head was almost a part of Johnny.

Perhaps Johnny needed a doll to play with, just as other little boys needed toy locomotives and white mice. Perhaps there was a streak of hard cruelty in Johnny that needed the humanizing influence of a doll. In that case, it would not be unmanly for

Johnny to play with a doll, right up to the age of ten.

Perhaps the bell-rope of Johnny's inner life needed to be rung by an ugly and ridiculous doll, to make clear, crystal notes that would sound out into eternity.

Stephen went slowly back up the stairs to Johnny's room, his feet dragging a little. He opened the door and peered in.

Johnny was still asleep.

Stephen crossed to Johnny's cot on tiptoe and put Fuzzy Head back, very carefully and gently.

Johnny opened his eyes.

"Uh! Hello Pops?"

Stephen grinned and gave his son's shoulder a pat.

"Hello, Johnny! Pleasant dreams!"

THE READER SPEAKS

(Continued from page 10)

less the turnout for the list in the June, 1949 **STARTLING STORIES** is a lot better we're going to discontinue the listings. Get your entries in by February first and, just because you've had your group listed once, don't withhold your entry. We want to make this a regular annual custom in both magazines—TWS every December and SS every June—so how about rallying 'round?

OUR NEXT ISSUE

THANKS to our recent enlargement in size we are able to publish the long novels which formerly were usable only in our companion magazine, **STARTLING STORIES**, and we're inaugurating this new policy with a triple-plated lulu—**THE WEAPON SHOPS OF ISHER** by A. E. van Vogt.

Those of you who have not read any of the "weapon shop" stories in other magazines are in for a delightful surprise and those of you who have can look forward to it with anticipation.

Like its predecessors, **THE WEAPON SHOPS OF ISHER** deals with the Earth in the distant future—when its material and spiritual marvels are divided between the centralization of empire and the deliberate and highly benevolent anarchy of the Weapon Shops themselves.

The never-ending struggle between these two disparate social elements is in danger of complete collapse due to a time and space warp in which a twentieth century Earthman, reporter Chris McAllister, has become the fulcrum that may destroy a universe.

Something has got to be done about him and both sides are seeking to turn the accomplishment to their own advantage. The world, which may die at any moment, is in a state of unbearable crisis.

Into this delicately balanced setup comes a young countryman named Cayle, who becomes unwittingly through his eidetic memory and genius at predicting all sorts of odds a vital factor in the situation. And it is Cayle—and his friend, the Weapon Shop girl, whom we follow through a brilliantly meshed maze of action and ideas to a climax as startling as it is thrilling.

Mr. van Vogt's introduction to TWS readers will be a memorable one. The author of the famed **SLAN** and **THE WORLD OF A** has produced a truly scintillating novel in **THE WEAPON SHOPS OF ISHER**.

James Blish, whose **MISTAKE INSIDE** is still fondly remembered, has collaborated with Damon Knight on a novelet about the visitor from space whose purpose must be solved before he destroys the world. It is entitled **THE WEAKNESS OF RVOG** and its climax is one which, for ingenuity and

suspense, should stop a lot of heart beats.

Benj. Miller, whose Orig Prem stories have already caused a lot of laughs, comes in with a longer incident about his temperamental robot, **MONSTERS FROM THE WEST**, in which the time-traveling little organizer solves the riddle of the wherefore of the vanishing Mayans. It's a howler.

Short stories will be plentiful in the new big TWS as will features—with F. Orlin Tremaine and the second of his articles on the road to the stars through man's understanding of himself, **PEAS TO HORSES TO MEN**. February should be a hot month for TWS readers without a trip to the southern hemisphere.

LETTERS FROM OUR READERS

ONE thing that can scarcely be said about this column is that it refuses to do any favor within its power. In proof thereof we print the following desperation epistle.

STOP THE PRESSES!

by Marvin Williams

Dear Editor: Stop! Don't print the letter I just sent you. I just learned that I'm wrong about Sturgeon being Kuttner. Don't print the letter or I'll get shot. Please, on bended knee, I beg you to have mercy. Not that I really expected you to print it anyway but if you should decide to change your mind **RIGHT NOW** I promise never to call you anything but nice names. After all, what'd I ever do to you except send you a couple of crummy stories. Don't print that letter!!!!!!
—1431 Second Avenue, South Cedar Rapids, Iowa.

There was nothing to get so desperate about, Marvin. True, we had intended to run your epistle above a wedge-shaped slab of cutting commentary on your belief that Theodore Sturgeon was merely another pen name for Henry Kuttner—but the column doesn't really *need* it—I mean, it's bigger than you or ourselves, so we're glad to suppress the note. Feel better now?

We hope not.

NOTE FROM NIPPON

by Pfc Fred J. Remus Jr.

Dear Editor: Please pardon the poor typing and correct it, but I have quite a few things that I want to get off of my mind.

In the first place, I have been reading everything that I could get my hands on that pertains to rockets, both liquid and powder fueled. In the second, I am one of those people who are intensely interested in the possibility of a "station in space." I want to contact all others interested in the same thing. I have developed a few of my own ideas on that subject. Here they are, and I would appreciate comment and query.

1. The space station is possible now. The only thing that holds us back is lack of either money or the information that the army holds.

2. The best method of construction that I can see

is a number of cellular units hexagonal in shape. A good analogy in this case is the comb of the honey bee. The first step would be to send one unit aloft and start it in its orbit. The "cell" contains the men and materials to attach the additional units as they are sent up. When the cell is in its orbit the propulsive unit could be detached and sent back to earth. A ribbon chute or some other device would come in handy at this point. The same rocket could be used to hoist more than one "cell" if it could be salvaged and refueled. I don't doubt but what most of them won't be re-usable, but if some were it would be worth the effort.

3. Uses of the station. I got a few ideas from Willy Ley's book "Rockets and Space Travel" that were interesting. As a laboratory it would be unequalled. As a fueling station it may not be necessary. A squib I saw in the "Stars and Stripes" for the Pacific Theater convinced me of that. It mentioned that a renewed contract for experiment on atomic fuels for aircraft and rockets was awarded by the Army to a certain physicist (I have forgotten his name). If there was no possibility of success why would they renew the contract? It mentioned two years as the length of the contract. Another article I read yesterday stated that the X-S1 had "many times" passed the supersonic barrier. I wonder what kind of fuel the X-S 9 will use, or do I already know? Perhaps it already is in use.

4. The materials used in construction should, I believe, consist mainly of glass. Now wait, don't start yelling, "Impossible!" before you know the facts. Glass can be made opaque to X-rays, a most desirable quality when the atmosphere of the earth no longer protect you. It can also be made to cut down the amount of incidental ultra-violet light in order to stop sunburn. There are other advantages, too, but someone may have a better idea.

That's all I have on hand about the station at the moment, but I would like to hear from someone who does know of a better material, if there is one.

Rhymes on the Moon

A baby on earth once cried for the moon
Legends were written of Luna.
I think that the space station is but a step,
And that if it doesn't get us there later, it'll get us there suna.

All right, Ed, now don't blow your top! Ogden Nash does it too. I had to get that out of my system and give you an opportunity to reply in kind. I sit here on the coast of Japan and read science fiction to pass away the time.

I am a weather observer, and my present schedule calls for three days on and three off. During my off days (take that any way you want) I think up "poetry". I have two favorite forms, the one Nash uses and limericks.—i.e.—

There once was a man in the moon
Who got good and drunk, the dumb goon
On the morning after,
He lay on the rafter,
He got far too "high" far too soon.
—19278700, 20-19 AWS Det., APO 468, Unit 1, c/o Postmaster, San Francisco, California.

Well, to carry this Ogden Nash thing a trifle further (did anyone else outside of ourselves ever confuse him inextricably with Donald Ogden Stewart?) let's try this on for size—

If in a space-ship we e'er eat raviola
We'll have to dine in an anti-grav gondola
And if while en route we come down with cosmasthma
We'll borrow the stewardess' anti-as-plasma.

The Edwin Lear-limerick form is almost too simple after such contrapuntal linguistic gymnastics. But none the less and howsoever—

There was a young man in Japan
Who never could work up a tan
When they said, "Are you Nip?"
He replied, "It's a gyp,
But my tendrils inform me I'm Slan."

In slightly more serious vein, may we wish you lots of answering correspondence, Pfc Remus, and hope that some of it drifts into this column? Drop us another line soon.

AN AUTHOR SPEAKS

by Joe Gibson

Dear Editor:

Perhaps it isn't customary
Unless we're in a mortuary
For eds to pub the letters
Of a writer
To a 'zine

Except in cases gastronomic
When science-fiction needs a tonic
We then may sally forth and
Slay the culprits
Low and mean

But leave us make a small exception
And with no fanfare or deception
Here's Gibson, you can have him
With complexion
Slightly green

Any relation between me and a BEM is purely hereditary.

But writing a story for a pro does put a fan in a spot. Aside from the fact that the readers'll probably make this *Gibson's Obituary* in reprisal. I like you, too. But I hadn't thought about it before—suppose you print this, this Thing! Fans are either going to think I'm conceitedly plugging myself, or trying to butter up Ye Ed to accept another Gibson yarn (fat chance I'd have of getting one accepted that way!) and if Gibson *must* plug himself, Ye Ed should lend him a ray-gun for purposes of same. I.e., if I want to sell you more yarns at least a little better than that first one, I should *shut up*!

Can't do it. Nope. Stand clear and gimme my say! Fact is, I simply want to go on record praising you for the best fan-letter columns of all the sf publications on the newsstands. Honestly, the letters in TRS and TEV are themselves enough to have my quarter plunked down every issue! And it is, fella, it is.

But say, I haven't read such gay repartee since Forrie Ackerman used to publish his fanzine *Voice of the Imagi-Nation*! Remember that one? Mmmmm—haow ah reminisce! And here in your colyums I find that fan still means fun, no matter how you pronounce it! Maybe I'm off my trolley or maybe I'll never grow up—it's still fun!

But on to other things. Bergey gals, for example. *Everyone* mentions the Bergey gals! Incidentally, there's a fairly good technical argument in favor of guys wearing Tee-shirts and gals wearing luxables in the artificial environment of spaceship or spacesuit. Even for spacesuits being transparent! On the latter, suppose your pressure-circulation gear goes on the blink—what's the next best indicator when your helmet dials give false readings?

Mabel! That's my birthmark!

But a lack of humor in sf surprises, rather than mortifies, me. Eeegads, some of the trajeddies we get! Ain't there enough? 'Sa rough life, I'll admit, but—you gotta stay happy!

One thing that roused my ire was the comment by Mrs. Helen Hough (TRS, August TWS) that "any magazine more likely to appeal to men seems to give the males a feeling that women should keep out." Should we tell the gals to run home and play with their dollies, Ed? Hey, that's my popsicle! Ya bum! Gads, and note how the femme fans run down the Bergey gals—and then go bobby-sox over the bulging-biceps lads! *How about that?*

One thing wrong with Conlon's space weapons—space is big and full of star-clutter. R.S. Richardson, the West Coast astronomer and scientifiction connoisseur, could make hash of a topic like this. Edwin Sigler has a point, but he's going out on a limb. Heinlein wrote some revealing paragraphs on ray-guns. Russ Woodman was apparently in the midst of one o' them moods. Perfectly natural thing, fella. At least, you're being your age—while in my case?? Hmmm.

C'mon, Ed—let's go over and blow the head off one in the Old Timers' Cafe.

Seriously, let's consider this Bergey gal argument. Are the covers worthless or do they have any value at all? Well, I'd say they do have value.

And while we're on the subject, has Astra Zimmer been around? Is she—er—um—actually a living, breathing Bergey gal? Hey, if *she* comes around, run up a distress signal, man! (Gads, if I only had biceps! Hmmm?)—24 Kensington Ave., Jersey City, N. J.

We should run up a distress signal in such a predicament, Joe. You'd better stay over on your own side of the Hudson and cool off. We've published plenty of authors' letters in this space—such as Kuttner, Wellman, Sturgeon and others. So you're in reasonably good company.

Get back to your typewriter, kulak!

LOVECRAFTIANA

by Mrs. Muriel E. Eddy

Dear Editor: Many readers of TWS have asked me about the exact condition of the grave of Howard Phillips Lovecraft. In fairness to all (because it would take hours to reply personally to each separate inquiry) I'd like to take enough space in your valued magazine to explain just where the grave of this great weird tales writer is located.

It is not, as many have imagined, situated in a lonesome part of an obscure rural cemetery—instead, it is part of the Phillips Family Burial Plot, in beautiful Swan Point Cemetery, about three miles from the center of Providence, capital of Rhode Island. This cemetery is the best, the most exclusive, and the most famous of all Rhode Island cemeteries. People from all over the country visit this beautiful burying-place. Its memorial statues are wonderful—angels, crosses, shafts pointing heavenward, really a marvelous place to rest!

Perhaps the most outstanding part of Swan Point Cemetery is the sign over the entrance arches, which reads: "This Cemetery Is Closed At Dusk. No Admittance After Dark." I've often thought what a weird story Lovecraft could have concocted after reading that sign! Green ivy vines grow all around the sign, which sways in the breeze as one drives in to a perfect maze of streets (all of them named) which wind in and out, in and out, in a never-ending fantasy of seemingly endless highroads and bypaths—and great, age-old trees grow in the cemetery. We saw some trees actually growing RIGHT OUT OF THE OLDEST GRAVES!

Lovecraft's name, age and time of birth and death you'll find chiseled into the huge marble central shaft, in the Phillips Family Burial Plot. His grave lies right behind the shaft, which is enormously tall, pointing a thin finger to the sky. He lies as near his mother and father as possible, with his aunts in the same plot, and his beloved grandparents are also interred there.

All the other graves have headstones and each grave, including Lovecraft's, is remarkably well-kept. When we visited Lovecraft's grave the last time, I kneeled reverently and with loving fingers removed a tiny green sprig of myrtle from Lovecraft's last resting-place. I kept it in a glass on the window-sill until it sprouted—then I sent it to an admirer of H.P.L. far, far away. I understand it took root and grew apace; So, all you fans of "different" stories who loved H.P.L. rest assured his earthly remains were well taken care of!

In closing, let me add that the OCTOBER, 1948, TWS was, in my way of thinking, "the best yet"—very, very good! Ray Bradbury, as usual, scored ace-high! I really disliked nothing in this issue—so why groan? Instead—thanks, dear editor. You did a superb job. This issue was TOPS! Thanks to everybody for writing. I've sent photos of H.P.L.'s last resting-place to many of your readers. I'm pleased to know our dear writer-pal had so many friends who miss him!—125 Pearl Street, Providence 7, Rhode Island.

As Mrs. Eddy indicated, the late Howard Phillips Lovecraft is generally rated among

the few outstanding latter-day American writers of the weird and occult.

WONDERFUL—WONDERFUL!

by R. W. Johnson

Dear Editor: Good news is always good, they say. And the news we may expect another 5c worth of pages in the next issue of TWS is good news indeed! And SS, too, is too be enlarged! Truly, the world is improving. The stf world, that is!

Stf has acquired a "new look" quite rapidly since the war. And I'm sure all will agree the change has been for the better. While I'm for the "new look," I'm definitely against the "Old Guard" authors writing for the "new look" under new names.

I've nothing against an author using pen names. But golly-whiz one pen name should be enough. (This beef doesn't apply to HanK, though. Everyone recognizes his super work, no matter what pseudonym he employs.) Also, I can't condone the practise of using two stories by the same writer in the magazine at the same time—unless the same name is used on both stories.

This is embarrassing and deceptive. It deceives the reader into believing he is getting more for his money than he actually is. Of course, what the reader doesn't know won't hurt him, so I suppose there isn't any real evil in this practise. When you get down to technicalities, it really doesn't matter who writes a story.

A good story by Sam Knutts would be just as good if it were signed Henry Kuttner or E.E. Smithsonian. So I suppose I haven't any real reason for kicking, except I just don't approve of it. I never have and never will approve either. Whether it be in stf or some other kind of fiction—if there is some other kind!

CLIMATE—INCORPORATED was the best yarn in the current crop, closely followed by THE ROTO-HOUSE, then HAPPY ENDING. For some reason, the feature novelet comes in fourth, with Will F.'s fantasy fifth. The rest tie for sixth.

All in all, TWS seems to be holding its own—way up on top of the heap!—Box 2392, West Gastonia, N. C.

For a moment there we thought you were going to give us an argument on the matter of using pseudonyms for authors. But you answered your own question very nicely. If the story is good it scarcely matters who wrote it and under what by-line. Personally, as long as we have the plays to read and see, we have never been able to understand the fuddy-duddy-ish snoopiness (under the guise of scholarship) which permits alleged human beings to spend their lives trying to prove that Shakespeare didn't write Shakespeare's plays.

It is a strange perversion. As to not using the same by-lines twice in an issue, it is proven and sound editorial policy—and, as you say, as long as the stories are good, so what? For the rest, thanks.

THAT SOUTH GATE GATE

by Richard Sneary

Dear %\$#—#&: How can I stand it? No letter this time. Oh the horror of it all! My fame is waning—I'm on the way out. Cast aside like a last years skirt. You don't love me anymore—you slob. And after I've given you the best years of my life.

Well about the most exciting thing was the official announcement you were going to 180 pages . . . This is great news for the readers that can't ever get enough. Looking at a my collection, and a few borrowed copies of late issues, I see that beats the page rate of all your competitors . . . If you can keep on with the good stories is the big question. You have a good

back log now, but will Kuttner and pen names be able to keep up with you. I hope so. . . .

One thing though. One is given to wonder if this is the end. Will you be apt to increase again in six months. To 210 pages for 30c. Then to 242 pages for 35c . . . In side of 10 years a copy of TWS would have 820 pages and cost \$1.25 . . . It would be a full time job just to read it . . . You see what could happen if you got carried away with this idea.

The story, Mr. Zytztz—was very good. It is a little off the usual line of gushy/bloody lead novels . . . Loomis is an old enough craftsman in the field that of this kine has come to be expected. Stevenson's art work was very good, but I would like to dissagree with the picture he drew of Mr. Zytztz. Ofcourse I suppose everyone got a different mental picture, but mine doesn't match his. First he is to spinly. I would expect more of a solid bush, with long and thin air roots, and senxitive feelers acting as hands and ear/eyes. As they seemed to live solely on Soler radation, their leaves should have been brouder.

As I don't even have a average interest in planet, I don't think it to much to expect your artist to use the same logic . . . I'm sure if we went to Mars and found they had been pituring us as being three feet high, and having two heads and ten legs we would be most insulted.

Oh yes . . . While on the subject of art, who did the spred on page 56-57? A reather compleat surch reveiled no name . . . Looks new. Looks like some one you stold from Gushy Love Tales . . . That is his peoples look like the kine found in love story mags. That's not an insult, but they are different . . . The backgroud though is a different matter. The first time I say it, (In a slick mag) it was good. This black and white copy isn't so good.

Anyway, whats Mars got to do with the story . . . It is Mars you know, . . . Even to the two moons. Who's that, the young spy she bladed to? Tosh . . . Who ever his guy is he is good . . . But you better give him a corse in stf art . . . Make him look at a few hundrad old copies. So far he doesn't have the feel.

I thought The Ionian Cycle very good . . . I kept wating for the scientist to get mad and try and kill the hero . . . Tenn fooled me all the way . . . More of this kine please . . . You pick up a little painless knowalage, and send a pleasen hour.

I can't understand St. Clair . . . She is such a good writer, yet she uses the stupidest plots. I know where she got the idea though. Remember thos round alumin houses pitured in LIFE about 18 months back. They were built around a center pilon . . . I must hand it to Mrs. SC for the neat switch . . . But still the plots to light.

Say what goes with Bradbury!! Does he want to drive all his headers off into a rest camp for people who see deros? This latest one pushes the reader out on the edge of his chair wondering how the hero is going to get out of the stupid situation, and then pushes him off. Add to it Kuttners little dusey, and you leave the reader with his fingernails and hair all over the place.

I yawn mildly when the hero bashes his way out of the inside of a BEM. When he blows a planet to peices to get even with his girl, I iter mildly. When in the line of duty he is killed, to die in his sweet-hearts arms, I rase an eye brow . . . But this . . . Eeeeeee Gad!

One feels like a kid in a western that is trying to warn the hero that Bloody Bart is sneaking up on him. Or like seeing the heros horse trip as he ruses to pull Miss. Jane off the tracks. . . Oh please . . . Only one at a time Ed. I can naw the nails off only one hand, have a heart.

In looking over the Reader Speaks I see you say you are cutting down on -hero-saves-the-world stories. Great. Keep this up and you will be as good as we all say you are.

Before I return Miss. (?) Gholson's love, I'd like to know how it was sent, and what she looks like . . . I fear I would have to make sure that they didn't drop a 'u' out of Gholson before I would let myself go.

Your remarks on putting crumbled art gum in pipe mix strikes us, (a none smoke) as being more feindish than a A-bomb . . . But while on the subject, did you ever subcatute a shaped turnip or potato for the soap in a barbers shaving-mug? This falls underthe heading of good clean fun . . . —An even better one is frosting a cake with beaten soap-suds. (One part water to one part soap and beat with egg beater.) Oh my, I'll give you the wrong impression of me. I'm reall a dear sweet lad that wouldn't think of doing such things.—2962 Santa Ana Street, South Gate, California.

Ourselves, we go for that shaped turnip in a lather mug—we use one ourselves. Back in boarding school some of the lads used to substitute pencils for bed-bolts. The victim would turn in after, say, a hard day at football practice and ready for the sack, would stretch out in blissful relaxation, turn over once—and that was all, brother! He'd be lying amid the apparent wreckage of his cot.

There is no end to the ingenuity—to say nothing of the energy—of youth. You can have it!

PRESENT IMPERFECT

by Mrs. Helen Hough

Dear Editor: Well, thanks so much for printing my letter and also for the judicious cutting. Next to seeing your magazine each month I can't think of anything better than increasing their size. After all, two months is a long time to wait.

The August issue is short of perfection by one small item—and since it comes at the very end of a string of fine stories I can overlook it. I just can't agree that the St. Clair series is something new in science fiction. It's much too much like the stories in the so-called "women's magazines" and I hope Mrs. St. Clair doesn't start a trend.

I enjoyed MR. ZYTZTZ tremendously. Sure hope he arrived home safely. After the troubles he had getting started he certainly deserved a break. Hereafter I shall treat my garden with great respect.

The three novelets ran neck and neck with perhaps a slight edge to CLIMATE—INCORPORATED, chiefly because I hate cold weather. Now if someone could invent a way to transport a case of soup within a can of beans within a can of peaches within a can of orange juice—well, hey!!

For me the short stories were topped by my favorite of favorites. And here is something to make you groan. I've read Bradbury here and Bradbury there. I seem to read Bradbury everywhere. The place never falters and style never sags. I've reread so often the pages are rags. Whether comic or tragic, profound or inane, he's the best of the lot by sheer legerdemain.

With which I'll let you shudder in peace.—517 East Main Street, Peru, Ind.

Oh well—what's the use, the lady seems to have cooked our goose. So we'll ride a cocked horse to Bradbury Cross and while thinking Peru would not be a great loss—we'll perforce remind ourselves just that we orta remember Peru's the birthplace of Cole Porter.

ELFIN DOUBLETALK

by J. F. Barnes

Dear Editor: Having spent a little time trying to decipher the cryptic statements of S. V. McDaniel as relayed by R. Clagett in Aug. TWS in regards to one "elf on a baton," I realize it is nothing but double-talk. It doesn't take his elementary geometry to see that the "variable time" he speaks of is variable length of time. In order to get even a semblance of a formula for travel thru time, the "time" would have to be not length of time but a dimensionless (excepting fourth) thing probably inexpressible in any formula, much less a simple one for arc length.

Am I right about this?

I would like to hear from your array of story reviewers on this subject as I am very interested in it, being a third year college student in math and physics among other things.

I read "Problem in Astrogation" yesterday because it seemed to cause controversy in your R.S. column. Likewise "Faceless Men" because according to letter

writers it was good. "The Sleeper is a Rebel" was good.

I likewise am an author, having had a very good story turned down by a well known mystery magazine a while back. I may decide to write Stf.

This letter obviously won't be printed because I used no ungrammatical words or constructions and misspelled nothing.—8 Park Place, Saratoga, Calif.

Obviously—Ed.

DJINN RICKEY

by Rickey Slavin

Dear Editor: I have just finished reading the August TWS and am sincerely glad to say that it was a remarkably good issue. In the last five years or so SS and TWS have jumped from a mediocre twinship to two of the best stf publications of the decade.

Noel Loomis' tongue-tying-titled story rates highest in the ish. The idea had a new twist at least. Very well written and amusing in spots. It is rare to find humor and emotion combined so efficiently in a space opus.

MEMORY—Ted Sturgeon is slipping. I remember a few stories of his, written during the war years, that really touched greatness. A disappointment. Wesley Long can be dismissed with a "fair." William Tenn is slowly but surely making a fine name for himself in the field. Bergey produced a wonderful cover. REGULATIONS by Leinster is a rehash of an ancient plot. For shame! Kuttner remains Hank, the Master.

Bradbury, however, seems to have hit his winning streak. Despite his present preoccupation with Mars et al, he brings to these dear old pages new concepts, neither revolutionary nor startling but provocative and stimulating to my decrepit imagination.

Fitzgerald et cie—poor.

Our dear Maggie St. Clair improves with time. Her description of the hands of the future has my beautician in fits trying to emulate it. He insists that cosmeticians of the future will need elementary courses in dermatology, chemistry, optice, dyes, plastics, ornithology (for the gosolba feathers) and fabrics (for the chartreuse sequins). Oh boy! Maybe the beauty treatments helped Oona but what happened when I tried to dye my hair green—oooh-ohhh! I still moan when I think of it.—1626 Coney Island Avenue, Brooklyn 30, New York.

Hate to think of what you'd have to say about an issue that struck you as bad, Rickey. And what's wrong with green hair? Plenty of folk have worn it from time to time—when some beautician fumbled.

BRIMFUL BRITAIN

by K. F. Slater, Esq.

Dear Editor: Once again I stick one of these air 10c forms into the old machine, to say that I am filled to the brim. With Joy. If I could poetise, I would. Another 32 pages! and only 5c more. And as I got a sub—I hope—I don't hafta pay the extra for munce and munce. Darn! See what these ere fonetics do to me. Keep em out, willya? I can't even spell either weigh now.

Talking of things to come brings me back to things in the past—July SS and Aug TWS. Well, I kind of care for the femmes, but they they belong? DO THEY? Answer, darn your hide. Aug TWS—a she-male in a cellophane space suit, with a gold fish bowl, and some riveted pants. I suppose those things in the waist band are rivets? I heard of shemales being sort of fastened up like that in the bad old days—does EB suggest that we are going back to it? Or am I wrong, and they ain't rivets?

The stories in both issues all passed me. No complaints of any real worth at all. My favorite was QUIS CUSTODIET (St. Clair) and the worst was THE ROTO-HOUSE (also St. Clair.) So what? Just means that I am getting a little tired of Oona? No, that wasn't it. What was it now? To be honest, I got an awful impression of 'I've been here before.'

MR. WHOSIT GOES TO MARS—I ain't akidding of you, but this here hardened old tough really got quite

emotional over that one. AND THAT IS SOMETHING FOR AN ENGLISHMAN TO ADMIT. YES, SIR. Mr. Loomis, if that had a been a couple of pages longer, I'd have had to pull me much-stained hankie out of me pocket and dabbed me eyes instead of wiping the beer off me beard. And same goes for you, tho not quite as much, L. Ron Hubbard. Say I must be turning into a sob sister. Pass me a pint, and let's wash this out of my system.

And that, for some unearthly reason, brings to mind an omission of mine. When writing to you about English FEN groups, I forgot our anarchistic, unorganised, band of brethren who congregate at the White Horse, Fetter Lane, London, E.C.4, every Thursday evening. Known as the LONDON CIRCLE more by force of outside persuasion than their own choice. The officer of the—er—unorganisation is Frank Fears, 6 Ferne Park Mansions, Ferne Park Road, Crouch End, London, who will be glad to receive correspondence and pass it on to other non-members of this non-organisation for replies, etc.

And any lad or lassie from the USA—or any other part of the world—who finds him/herself in London will be welcomed by the biggest bunch of fans that the UK has congregated in one spot. They will meet sf and fantasy authors—A. C. Clark, Will Temple, Editors Carnell and Gillings—and many other folk there. A fine bunch—and altho they seem to be fanatically anti-organisation, the output of that bunch is the biggest in the UK. And my apologies to the LONDON CIRCLE if any of the above comments may be considered offensive—but you know me, chums. Yer ole pal, Ken. No flowers by request. I gotta face that bunch come October and my next leave. Cor, stone the crows.

Getting back in this equally unorganised letter to the TWS-SS combine—let me say here and now, that should Captain Future ever put in a re-appearance, I'll send a flock of my tame ghouls, with two or three atom bombs apiece, to Suite 1400. And that goes for all those letter writers who ask for him too. If funds are sufficient, and the market good enough, how about putting out a FANTASY mag. making TWS strictly S.F., and STARTLING in between? Now theres an idea—and it's all yours, gratis.—13 Gp. R.P.C., B.A.O.R. 5.

As if we didn't have troubles enough with two more-or-less stf magazines draped gracelessly around our size seventeen-and-a-half neck. Well, we're only trying to live up to the Taurus sign we were born under. Actually, Mr. Esquire, no pure (!) fantasy magazine has managed to survive long of recent years. Apparently those mundane folk with sufficient scratch to buy such a gazette prefer to feel that their stories latch onto to something somehow.

Your London Circle sounds fine—wish we could fly over some Thursday. We know a number of the lads outside of yourself via the correspondence route and would like to make it more personal. Your remarks about the riveted pants on the August cover are duly noted and filed away—yes, we said filed.

WE'LL BITE AGAIN—WHAT?

by W. Paul Ganley

Dear Editor: Re the Aug. '48 Issue: I have a problem. It is about the novel. I happen to know that the nearest star is about four light years distant and that star is not Velorum. Then that is more than four light years away. Therefore: It takes them four years (or more) to get back, they can stand only six months with a human being, and they go back WITH A MAN. The time would be greater if they went less than light speed, and they cannot exceed it, says science. Well, c'mon, what happened?

Outside of this, it was okay. I will use the old system, and give it a B-plus. Bradbury second, with B. Will Jenkins—What!!!! Him in third place? No!!! —Captured a B— for good style. CLIMATE—INC., IONIAN CYCLE and H. K. can battle it out for a C-plus.

Mrs. St. Clair has a C— it was Oona's best—THE DEVIL etc. the same—by th' way, I did like Bud ('scuse me while I make out my will)—and MEM-ORY, the only rotten apple in the bunch, gets a Z—.

The best Letter in THE READER SPEWS was by Van Couvering; the one to which I was most indifferent, Sigler's. The cover was good, except for the heavy metal spacesuit. I like Bergey.

The earliest ish I have is April '47. Have you any back issues? And who is Cap Future? A book? A mag? Or perhaps, from comments I've heard, it's a comic book. I dunno. It warn't a bad ish, just average—119 Ward Road, N. Tonawanda, N. Y.

In answer to you ZYTZTZ question—we feel that, buoyed up by being en route to home at last, the ZYTZTZies felt they would be able to stand the gaff—or should we say gaffer, as our hero had done a bit of aging by that time?

We do not have back issues to spare, alas. But perhaps some kindly and unavaricious will write you now that he knows you want them. CAPTAIN FUTURE was for several years the stout companion magazine for TWS and SS. And its Curt Newton novels the quintessence of space opera.

NAUSEA GNAWS ON YOU

by Wally Weber

Letter Editor: We have before us an interesting situation. We have before us the nauseous prospect of living in a world contaminated with science-fiction in greater and more intense quantity. We have before us a menace unequalled by any previously occurring threat to our existence. We have before us more of this crud.

This latest move on the part of Standard Magazines Incorporated to increase the output of science-fiction per month has proven that they do not want their offices cluttered up with stf. If they did, they would keep it all to themselves instead of allowing it to fall into the hands of the public. But this is not all of the story. This invidious group of publishers means to ruin civilization itself!

Reflect for a moment. What will be the consequence of the publication of a larger magazine? Obviously, the public will read more. As the publication increases in size and frequency, thousands of people will neglect their social obligations so that they will have time to read and write letters to the editor. Civilization will crumble because the public will be so busy reading and writing that no time will be available to keep society going.

People will become sickly, their health ruined because they did not have the time to eat or sleep. Even the blind will not be spared, for they will soon die from overwork resulting from their efforts to bury the dead that litter the streets near magazine stands and mail boxes. And the reason for all of this is still more sinister than the results explained thus far.

First of all, dig through your collection of pulps until you have uncovered the August '48 issue of TWS. Then turn to page number 132. Now read the last paragraph of the letter by Mary Jane Gholson which appears in the second column. Now read the last four lines of the editor's comment. Do you see the horrible significance?

Mary Jane merely suggested that the editor was Marchioni and the editor immediately leaped to the defensive. His words fairly radiated a fear that his identity had been discovered; he ended with the threat, "Seriously, lay off our anonymity!"

Now think, why would the editor be afraid that people would think he was Marchioni? He has absolutely no reason for such a fear. Many persons would feel it an honor to be Marchioni. Only one conclusion can

be drawn. The editor mistook the name *Marchioni* for the word *macaroni*! Certainly you see it now. *The macaronis are taking over the world!!*

It is clear, now, what became of Sergeant Saturn and his faithful companions. Bravely they must have stood, four things against an overwhelming horde of slithering macaronis, as they fought a courageous battle to save a civilization that had shunned them. I plead with you—do not allow this tragic injustice to go unavenged!

Strike now before it is too late! Rebel against the tyranny of the invaders! Even now I can hear the restless movements of thousands of tiny, loathsome bodies in the pantry. Listen closely—you may be able to hear them, too. Fight now or you lose your freedom of the macaronis!!—Box 858, Ritzville, Washington.

Webster's New International Dictionary, Second Edition, Unabridged, lists the following under the topic above treated—

MACARONI; of uncertain origin Cf macaroon. 1.) A kind of paste, composed chiefly of wheat flour, dried in the form of slender tubes, and used, when cooked, as food. Cf spaghetti, vermicelli.

2.) a One of a class of traveled young men affecting foreign ways—first used in England about 1760. b Hence, an exquisite, a fop. c pl U. S. Historical. A body of Maryland soldiers in the Revolutionary War, wearing a gay uniform.

3.) In the West Indies, Mexico etc., the silver Mexican two-real piece or its equivalent. Obs.

4.) A rock hopper or crested penguin. See Rock Hopper.

5.) A medley; something droll or extravagant.

Personally, we prefer definition 4.). If we aren't a rock hopper, what are we?

MAG SAG

by Julian Snyder

Dear Editor:

*I see where the mag
Is beginning to sag
With pages and will cost two bits
If Oona you'll strangle
My dough I'll untangle
Just to keep reading your hits*

*Finlay is great
There'll be no debate
And Stevens is wonderful too
Just can't help fighting
What Margaret is writing
Please let it end up in the flue*

I was very happy to see Noel Loomis back, long may he wave. While Mr. Zytztztz... wasn't as good as the *City of Glass* it easily bettered *Iron Men*. This story, however, must end up in a dead heat with Kuttner's little epic.

Unlike the great majority of your readers I don't like Hank's novels—nor do I play favorites. I don't like his short stories either. *Happy Ending* is the first good thing he's done since *A Million Years to Conquer* (which by the way is one of the best things you have ever published).

The *Ionian Cycle* was a fine refreshing change of fare. *Climate-Incorporated* has been done before, though not any better. The O. Henry ending saved *Memory* from the ranks of the drab. Unfortunately nothing could save *The Rotohouse*. It wasn't terrible, but (the foregoing is to be read thus: "Her face wouldn't stop a clock but").

Bradbury always makes good reading and no further comment is necessary. Leinster is one of my top favorites but no more like *Regulations* please. Fitzgerald has greatly improved on the Bud Gregory tripe though I don't see how he could help it.

What are the pics on pp 9 and 15 supposed to represent???

If anyone thinks that by writing this letter I have committed a semantic misdemeanor, I agree.—5000 N. Troy St., Chicago 25, Illinois.

Well, we'll reply in kind—or is unkind the

word for it? Here goes—

*The curvacious leavin's
of Artist Verne Stevens
On p-p-s fifteen and nine
May not make much sense
to the authors intents
But as drawings we liked them just fine.*

*So why should we care,
Let it get in our hair
That the subject's dragged in by the heels?
We only wish we
Were like Zytztz, carefree,
Amid damsels as sinuous as eels.*

However, after viewing the above, we wonder if most of you aren't a bit tired of our continuing to carry on with the semantics.

THE MODEL BEM

by Marion "Astra" Zimmer

Dear Editor: Permit me to remark, that I am pleased with the cover of the August, 1948, issue of TWS. Not because of the transparent Space-suit the girl is wearing, but because of the fact that the transparent space-suit is portrayed. Usually the space-suit has to be taken for granted in its transparency. I still hate your BEMS—or rather, Bergey's Bems, for I'm quite sure YOU don't either draw them or serve as model, contrary to some expectations.

Please! Who were the three babes drawn by Finlay (?) for MR. ZYTZTZ GOES TO MARS? I don't remember a woman in the story at all! In fact, there weren't any! Excellent story, though. I like that type of tale, making an alien the protagonist, with Old Earth and its characters being put in a rather sorry light. It's more apt to be that way than it is the way most S-F authors write—i. e. with Earth winning every ultimate battle.

REGULATIONS, also, was good. Leinster, in fact, is almost never poor, I've found. Oh—how in the deuce am I supposed to go through the list and say about all the stories? I won't do it. Suffice it to say that I'm pleased to see so many S-F tales. You've been having a bit too much fantasy of late, I think and I'm glad to see a return to the good old S-F, only more "slick" than ever before. Orchids to Kuttner for HAPPY ENDING and to Bradbury for THE EARTH MEN. One large razz-berry to La St. Clair for the ROTOHOUSE. It was the worst story St. Clair has written. I'm sorry to see such trash, for she CAN do much better. As everyone knows.

Now a note to F. E. Clark.

Poetry is NOT a "free outburst of feeling whatever form it may take, or how clumsy its rhythm." Poetry was first created far back in the days of the Greeks and the tradition of form and—yes, scansion—was initiated then! Since those days, poetry has been distinguished from prose by METRE, RHYME (if needed) and RHYTHM. Lacking these, it IS NOT POETRY, by definition, whatever its emotional impact. There is a difference between creating a new form and monkeying with an old one! Carl Sandburg is not a Poet—he is writer of lyrical prose. Shelley IS a poet and likewise (if you go in for moderns) Edna St. Vincent Millay is a poet, a great poet. Vachel Lindsay and Alfred Noyes are poets, and so, for your information, Mr. F. E. Clark, are many of the great fantasy authors, C. A. Smith and H. P. Lovecraft among others.

And scansion, despite its horrific name and few possibilities, is the easiest thing in the world to understand—MY *English Versification* (I wonder if you have the same book I do) makes it VERY simple. BUT DON'T CALL FREE VERSE POETRY. IT IS NOT!

Therefore, Mr. Clark:

*Go perk up your scansion and shine up your rhyme
For meter is never passe
And though free verse may be printed some of the time
Most of it will be thrown away*

*The doggiest dog'grel that ever was typed
Is better than all your free verse
When at Editor's eare for our scansion you griped
I can sympathize with Ye Ed's curse.*

*Well, the fellow who's stupid and just cannot scan
Will find a new era is here
And the aesthete who tries to throw scansion ash-can
Will be left to bewail in his beer!*

*Oh, the Editor prints STORIES I do not read
But forever I'll take his part
For if from synthetic "free verse" the fans will be freed
He's a man after my own heart!*

Which ought to hold this Clark BEM for awhile. I really feel strongly about Scansion in verse. Thanks for squelching him so thoroughly.

And as I have nothing else to talk about, farewell, dear Editor. WHY IN THE DICKENS DON'T YOU LET US KNOW YOUR NAME! If we don't call your name we can't call you anything but the same old "Dear Editor", if being especially affectionate we might say Dear Ed. "Sarge Saturn" was at least original, but EVERY darn mag on the market has an "Editor". If you won't bring back your by-line, or tell us your name, at least tell us by what nickname we can address you! (Nyaaaaaaah—)—R. F. D. #1 East Greenbush, N. Y.

Sorry, Astra, if you don't know our name by this time you're less of a fan than you appear to be. It is neither Marchioni nor Macaroni, however.

While we are inclined to agree with your views on what is poetry, aren't you just a trifle didactic? Actually, it is our supposition that metred verse, as we know it, came into being for two definite causes. One—as lyrics to melodies, picked out on the lyre as the word lyric itself reveals. Two—as an aid to memory in a day when there was virtually no written phrase.

Therefore, without music, we consider poetry chiefly fit for jest in modern life, since human memory of words has become almost non-existent under the impact of books and libraries. One can do so much more with prose, metric or otherwise, than confined within the limits of scansion and beat. None the less and notwithstanding—

*We've never posseed for purple BEMs
Although it's oft been hinted
We'd look ideal for delir. tremes.
If we were softly tinted.*

See what we mean?

DIETZ T.'S

by Franklin M. Dietz Jr.

Dear Editor: Here I am back again, this time with comment and chatter about the August issue of TWS.

First, THE READERS SQUEAKS, that part of the mag to which all true fans turn first, was swell, with a good variety from technical discussions to humorous letters, humor such as Mr. Van Couvering's letter.

The lead novel "MR. ZYTZTZ GOES TO MARS" was great—oh so great. I could rave about it all night, but I've more of other stuff to talk about, so I won't. The story was well written, though, and had an excellent plot. It was absolutely minus the "war" theme which

we are so plagued with. Its theme was not to try and show us humans how miserable we are either. Nor was it that of trying to give us a lesson in how to make us humans better beings.

I did notice a couple remarks on how we are short of a perfect "society", but these were only incidents of the plot, not the theme, so they became interesting rather than boring. All in all a swell story, to be remembered very much, and hard to forget. More of Noel Loomis I say. How about it ed?

Sturgeon's novelette "MEMORY" was very good too. I liked immensely the theories which Mr. Sturgeon put forth in the story. They seemed very possible, much more so than some we see in current stories.

And Bradbury's yarn "THE EARTH MEN" was, I thought, one of the best handled pieces of STfictional humor to ever come from a pen. Boy, when Ray really gets down to it, he can turn out some good work.

"CLIMATE—INCORPORATED". Wesly Long's contribution to the issue, was another very good story, one of those swell "very-possible-in-the-near-future" yarns which are hard to forget for quite some time.

The other stories were all good—interesting and entertaining, but I won't bore you with the details. That coming increase in the number of pages sounds swell. I can't wait. Surely we fans will be glad to plunk down a quarter for TWS and SS, just so long as we know we're getting plenty for our money. And with the present issue as an example of future issues (I hope) we will know we are getting our money's worth.

Finlay's pics, in my opinion, were wonderful as usual. But naturally, I'm a Finlay fan. I'll say nothing about the cover. As usual it's Bergey, with his she-males skantily clad.

So that, dear Editor, is my view on the issue. A wonderful job throughout. We fans hope you keep it up in the issues to come.—Box A, Kings Park, Long Island, New York.

Well, we have a sweet tooth at times, Franklin, so far be it from us to quibble at such a diet of treacle. Thanks. However, just to spice things up a bit, let's turn to—

VULGAR SOUNDS

by Bob Rivenes (rhymes with ravines)

Dear Editor: On delving into your two magazines, I feel compelled to write you letting you know how a neophyte feels about your stf publications. On analyzing TWS, I have come to the conclusion that I must first set down various vulgar sounds and exclamations phonetically spelled. Since this does not seem to me the way to advance stf reading, I have refrained from doing so.

The next step appears to be to criticize the artwork which is so ably done. My one criticism is that the first illustration for the lead stories in the July STARTLING and the August TWS have no connection with the story content.

As to the question of story analysis, I will confine myself to the August TWS. I think it unfortunate that three of the stories dealt with landing on Mars.

The best story of the issue was (is) THE EARTH MEN by the master of the weird if not of stf, Ray Bradbury. I am convinced that I don't want to be the first on Mars.

MR. ZYTZTZ GOES TO MARS and Kuttner's scrambled HAPPY ENDING ran a dead heat for second. CLIMATE—INCORPORATED, THE DEVIL OF EAST LUPTON, VERMONT and the IONIAN CYCLE won fourth, fifth, and sixth. The remainder come a confused last.

What's BEM? Boobs en masse?—122 W. Lamme, Bozeman, Montana.

Oh, no—not again! Well, a BEM is a bug-eyed monster, such as seen on the covers of early and primitive stf magazines, you cad!

NEOPHYTE FROM DIXIE

by L. N. Crimmins

Dear Editor: Have just finished the August issue of TWS and must say that your mag is improving all of

[Turn to page 160]

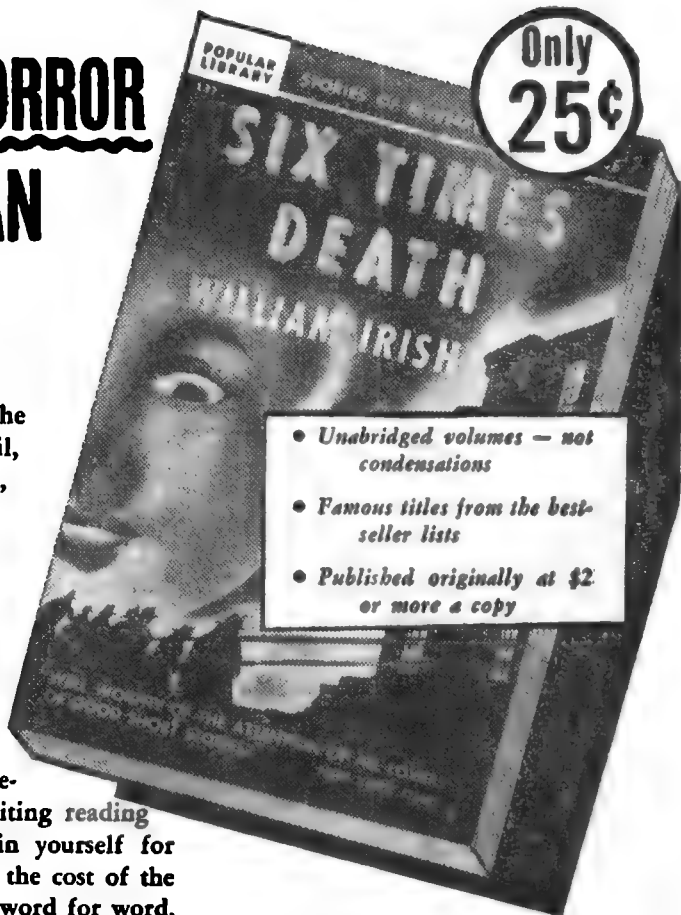
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the time, with the exception of the covers. I particularly liked your lead novel—Mr. Zytztz Goes to Mars. It was one of the best I have read about the meeting of two individuals from different worlds.

Happy Ending and The Earth Men vie for second place as both were highly enjoyable and had something to say. On the same platform with the above two was The Devil of East Lupton Vermont. As for the others I did not particularly care for them, with the Rotohouse being, by far, the worse of the lot.

The interior pics, with Finlay taking first place, were much better than the usual inside illos. Taking everything into consideration, I think that your mag is making excellent progress.

Although I have been reading Science Fiction for many years, and have noted the fan clubs continually sprouting up in many places, there are, with little exception, very few readers, or should I say very few readers that write in from the southern part of the United States. Are we that retrogressive?

This, as you no doubt have been able to see, is the first time I have written you a letter, but with the current Let's-Go-Southerners cry ringing in my ears, I hope it shan't be the last.—1682 N. Broad, New Orleans, La.

Glad you liked the issue, L.N. And we hope publication of your letter brings you some Louisiana fan response.

MELLOW FELLOW

by Frank Evans Clark

Dear Ed: After the cracks you made about my letter in the August TWS, it seems to me that you're in line for a stinging rebuttal but you have put me in such a mellow mood through the fine stories in this issue that I haven't the heart to rebuke you. So you get off easy.

The finest story was "Happy Ending" by Hank Kuttner, the Fair-haired One. Second best was the one by that other tow-headed kid, Ray Bradbury (Have you ever heard a word against Bradbury?).

I was particularly pleased to see Theodore Sturgeon's name on your contents page, but his story disappointed me. I was hoping for some *fantasy* from Mr. Sturgeon. I thought his characterization of Phyllis Exeter was a little heavy-handed, but at least he *tried* to characterize. Please give us more of Sturgeon's work. And *Heinlein*.

Oh, and please, L. Ron Hubbard, too.

Mr. Zytztz was good and so was the *Ionian Cycle*.

By the way, back circa 1944-45, I read several stories giving a single reference to "the ill-fated expedition to Io", without any further amplification. It struck me as unusual that several different authors would all refer to the same fictitious disaster (reminiscent of Lovecraft's wide-spread Necromonicon).

Was there ever any story about an "Ill-fated expedition to Io" that became so famous that it became accepted as a part of sf history as have the planet Vulcan and the bulgers? This has been preying on my mind for a long time, so please enlighten me if you can.

One hundred eighty pages and the return of La Brackett, sound wonderful! Just keep the story quality up. Oh, to finish out the issue: *Climate Inc.* and Fitz's story were only average. *The Rotohouse* was poor.

A word about the sexy pics; I'm getting fed up on them!

Glad to see Chaddo's opinion on jazz. I'm a fanatical Dixieland man myself, but I can stomach some of the milder bop, too.

So you like Lou McGarrity? As the trombone is my favorite instrument to listen to, I'd like to put in a good word for Vic Dickinson, Eddie Edwards, Kild Ory and Jack Teagarden, all fine men, and also the peer of them all, Georg Brunis. (That's the way he wants his name spelled; says it's lucky according to the stars.)

It's good to hear that you're putting your foot down on the one-man-to-save-the-world-stories. How about putting a little accent on beautiful fantasy?

Chris Keller's letter was just what you needed. I hope you get many more of the same.—113 Central Avenue, Baldwin, New York.

Students—how about helping out Mr. Clark on that Io business? We are as much

in the dark as he is. So let us know, if anyone does.

And while naming fine trombone players, Frank, don't forget Miff Mole, J. C. Higginbottom and—when he wants to forget commercialism, Tommy Dorsay. Also Sidney de Paris and a whole flock of other brilliant technicians whose names momentarily escape us. Also the late Glen Miller, the equally late George Troop and the entire three-man trombone section Don Redman's band sported back in 1932-3. Confidentially, we think Jack Teagarden is the best of the lot by a country mile.

FLOPPEROO

by Lin Carter

Hi yuh: Sure an' it pains my little heart to be sayin' this, chum, but you sure flopped with the August number. First there was that aw-ful cover, then the poor lead story, then a bunch of mediocre shorts. Loomis wrote one good novel, CITY OF GLASS, and that was very good. And after that, nothing but hack. This one had a flimsy plot, awkward characterization, and unpolished development.

Let me elucidate a bit: most of the fuss and bother was whether or not the Zytzies were human or not. It was finally decided that, since they didn't have eyes, they weren't human. Very clever deduction . . . they also didn't have arms, legs, heads, mouths, and a few other such incidentals.

Another thing that rubbed me the wrong way, was that they tried so hard to get back in the Air Marines. Apparently, the fact that they had gained immortal glory by being the first men to conquer space and set foot on three planets, just wasn't important. HRUMPH!

Regulations was readable, but really didn't fit TWS at all. Kuttner's short story was the one bright light in the whole issue. Ah, Hank, ah luv yah! I had to read it twice before I got the inverted plot structure straight. And *Memory* was quite good. Sturgeon is versatile, I'll say that much for him! Bradbury's yarn was typical of Brad, but the Long novelet was weak. Nice reading, tho. And for the love of Poo, get Mrs. St. Clair off those horrible Oona and Jick things, willya?

The Reader Speaks was his usual hoarse self. Some very good, some very bad, most very dull. Oliver, Ebey, Coevering and some others are your best. Hah, I wondered how many folks were gonna pun that *Dud* thing!

I note with great approval the new type you use in the headings. Veddy, veddy nize. . . all we need now is a new Contents Page set-up. 'Cnest ce pas? Till then.—1734 Newark St. So. St. Pete, Fla.

Apparently the entire Loomis story went over your oblate cranium, Lin. So let's just skip the whole business, shall we?

BOP FOR REBOP

by Jim Leary

Dear Ed: As if your life didn't contain enough misery I am now adding to your present burden with my review of the latest TWS. For you, there is no escape. Just be grateful that I don't write in verse—as yet.

The Editorial—very good. I don't imagine that anyone misses the Xeno and Wartears stuff with a replacement like this. I'll be looking forward to the editorials in future issues, as will a lot of other fans. Just as a suggestion though, don't get in too deep. That is to say, leave the technical details of atomic power alone, and concentrate on the "human interest" angle of various problems. That way you'll have a greater and more varied audience. Keep the technical stuff in its own allotted magazines, say I.

The stories—they're all so good that I can't rate

them. That Kuttner short just goes to show you that a fresh twist can still be worked in on the time travel theme. As for the cover painting for "The Ionian Cycle," this is one time that the readers can't say that Bergey didn't put a spacesuit on the gal, because he did—and what a suit!

Pics—Why don't you kick out Napoli and get some good artists? More Finlay would be appreciated, especially on lead novels. You could have him do four or five full-page drawings (with borders) for each novel. They could be scattered throughout the story.

The Reader Speaks—Chad Oliver—Why don't you stick to one subject? first you mention jazz, then you speak of bop. Tsk Tsk! You sound like someone dropped some Armstrongs on your head and knocked you dizzy—or maybe they were Bigards?

Van Couvering—Is your memory poor, or is it that you just don't give a darn?

Russell Clagget—Elf on a baton, indeed! This only goes to show that you don't have to be crazy to write to TRS, but it helps.

Frank Evans Clark—Don't let the Editor get you down. You're right on free verse being more accepted nowadays. In real poetry, an author can't hide his lack of feeling behind meter if it isn't there. Of course, the Editor's just a hack anyway, so. . . . Nasty little fella, ain't I?

David Wesser—H₂SO₄—That's goodbye in any language.—4718 Forest Hills Road, Rockford, Illinois.

You're right about that—so good-by! However, you did state our policy on editorials exactly. Certainly the impact of science on humanity is as vital as the impact of humanity on science. Now—good-by again.

COMMUNIQUE

by Jerri Bullock

Hi, Ed: Maybe I've been working for the Navy too long, but anyway here's my communique: Re ur TWS dtd June 48 X Received impression at this end that majority of stories were on the ironic side X Ray Bradbury did it again X His novelet surpasses *Trans-Galactic Twins*, although I'm not complaining about the latter X

BULLETIN

To: B.L.Randolph

From: Me.

Subj: letter pp 136.

You misunderstood my letter, Billie, and looking back over it I can't say I blame you. By active fan, in that case, I meant active TWS & SS fan—not the entire stf field. I co-edit one mag, and draw for a couple of others; and will be a member (I hope) soon of the N3F.

Back to TWS. Before I sign off, let me say "Consulate" was a very catchy story. When I started to read it, I thought it was crummy; halfway through, I found my opinion being reversed. When I had finished I found I'd really enjoyed it. It just crept up and hit me over the head I guess. Oh well, I've always been told I had holes in my head. Over and out—22200 Lemon Ave., Hayward, Calif.

Why not fill out another application for consular service, Jerri, since you liked the Penntale so much?

OTTAWATOMIE

by J. Nick Wickenden

Dear Editor: (Gee, how I hate that "Dear Editor"! Sometime I'll say it in Martian, "Kaor, Zombi" instead.) Forthwith, I pass hurriedly over the tales in the latest TWS.

MISTER ZIT-ZIT &c: (That's as close as I can come to its pronunciation) I thought (Oh, yes I can too think) that it was not an extraordinary tale, although passable. The fault was in its characterization. Rate 6/10.

MEMORY: Well done! 7.5/10 for the surprise ending.

CLIMATE-INCORPORATED: Not as good as Memory, but all right. The time machine intrigues me. 6.5/10.

[Turn page]

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NAME AGE.....
(Please Print Plainly, Include Zone Number)

ADDRESS

THE IONIAN CYCLE: A happy tie with "Regulations" for first place. Unusually good! 8/10.

REGULATIONS: Always good things to follow. Somehow I am a sucker for Leinster, so I give it 8/10.

HAPPY ENDING: Unusual, I thought when I read the end. The perfect foil for people who always peek at the last part of a story. Ingenious! On top of that, a super tale with a terrific wallop. 7.5/10.

THE EARTH MEN: It had poor characterization, or else it would have been on top. Only 6/10.

THE DEVIL OF EAST LUPTON, VERMONT: The worst in the issue. 5/10.

THE ROTOHOUSE: Ha, Tee hee. Snicker. Hoho. Belly laugh. HEE HEE. AHA. HA HA HA HA. &c. 7½/10. I like Jick and Oona.

THE COVER: The girl looks in pain. The BEM seems to cause the FEM distress. Why is this? Your chivalry, Bergey. Erase the monsters, and put the damsel out of distress! Worth 6/10.

THE PIX: Stevens is crazy. He puts three fair maids for a heading, when the story, Mister Zit-zit, has no girls in it. How much of a wolf can you be??

Kelvin on Page 46 looks just like my math teacher. Page 119 was a good illustration, but not suited for the humor story. Kiemle does Jick and Oona up better.

I HATE NAPOLI. I HATE NAPOLI. I HATE NAPOLI.

THE LETTERS are dismissed with a brief Haha! for Couvering.

No, I do not know Ron Anger though I would like to.

NOW—Here is the story
Of what I have done.
My reason for failure
Is only just one.

- (2) *Whenever I met one*
Who seemed to be ripe
To start reading SF
Instead of just tripe,
- (3) *I'd give him a build-up*
And loan him a mag
And have lots of fun whilst
Of SF I'd brag.
- (4) *But then when his Ma*
Saw the dame on the
cover
She wouldn't let him
read it
And I'd lose another.
- (5) *Take the dame off the cover*
Remove my gripe one,
Then I'll sell Science-fiction
And have me some fun!
—72 Gwynne Avenue, Ottawa, Ontario.

Better write Steven on wolfism. And thanks for liking Jick and Oona. You'll have to struggle along with the covers for awhile, though.

IT'S GOT US

by R. F. Dykeman

Dear Ed: . . . well, now how did this get in here?

Wonder Stories was superb, yes?
Living up in full to last months blurb, quis?
Really, think I you have the crop's cream,
Please don't in the future let us dream,
That you'll with malicious aforethought,
Regress way off the beam,
And down your up and kick the lean,
And hungry readers of the mag
Full in the teeth with quality of downward sag,
That should be,
Returned via mail-bag,
To authors smug, with heads held high,
Who're in a rut
And ought to die;
So see you now, and harken by,
The words of lowly scribes,
Such as I;
And keep it up and mix it up,
And give us only choicest pie.

I go now and presently drop dead.—R. D. #5, Glenside, Ithaca, N.Y.

Okay, there, Dykeman, we shall try
To give you not a thing but pie—
From nesselrode with chocolate chips
To lemon topped with meringue dips
Via the entire chiffon tribe
Of types too many to describe
And apple plain and deep dish too
And cherry with ambrosial hue
And pork and pigeon, chicken, whew!
And beef and kidney full of goo
And—holy cow!—it must be true
I'm getting hungry, how are you?

Bring on the bicarbonate of soda, nurse!
Hey, Nurse!!!

FIRST IN TEN

by Ricardo DeGeorge

Dear Editor: For over ten years I have been an ardent STF and Fantasy fan, but this is my first letter to a magazine. I am interested in joining a fan club, if possible, and I would greatly appreciate letters from anyone wishing to discuss science fiction and fantasy. Having completed my Merritt collection, I have several duplicates which I am interested in trading for works of A. E. van Vogt, H. G. Wells, and others. Anyone interested please get in touch with me by mail.

Three cheers for whoever is responsible for lengthening the mag to 180 pags. Now how about a hundred-page Kuttner novel. If given the time, he could produce works comparable to any of the old "masters".

As for the stories:

Mr. Zytztz Goes to Mars—I quote from the contents page, "A NOVEL of the future." Frankly, I've read longer short stories. What there was of it was quite good. Why do humans always turn out to be such rats?

Memory—The author forgot to explain that wonderful density process. Very vague. Characterization good.

Climate-Incorporated—So it was a time-machine, huh! Let's not carry a good thing too far.

The Ionian Cycle—Lisoti chelofh vidwurkdaywlnf. In Ogilvy Basic Language Pattern, 6½, this means"—

Regulations—Did this guy write the "Disciplinary Circuit".

Happy Ending—Typical Kuttner touch. The man is another Keith Hammond.

The Earth Men—So, so.

The Devil Of East Lupton, Vermont—So, so.

The Rotohouse—So.

The Reader Speaks—Better and better.

Since everybody writes poems:

THE QUEST FOR MARS

In a place of squalor at the end of earth,
A peasant woman to a boy gave birth,
His face was ugly but his limbs were long,
And in his heart there played a song.

To Mars, to Mars, I must go,
Swift as an arrow shot from a bow.
Through storm and danger and loneliness of space,
My song will carry me to that place.

To a place in Central Asia high among the distant stars,
A young earthbound man wandered with his heart on
distant Mars,
From that valley in the mountains to the blue of
desert skies,
Stood a shimmering sphere of metal with radar for
its eyes.

Skyward, skyward, ever skyward above the farthest
tread of man,

The silver sphere climbed ever higher in its all-embracing span,
In the simple metal cabin sat a man with single thought,
"From the ignorance of poverty to this place of honor have I fought."

V

In a twisted mass of metal on the planet that he sought,
Lay a solitary body which a song to Mars had brought,
He had reached a distant planet, first of all the human race,
And when a beam ripped off his helmet, it found a smile upon his face.

—269 East 194 St., Bronx 58, New York.

You leave us in wonder, Ricardo DeGeorge, for when your young hero crashed into a gorge to lie smashed with an asinine grin on his pan, did the BEM perchance know his next meal was a man?

WELL, WELL—PROSE!

by Mrs. Eva Firestone

Amigo: Copied following from a text book by J. H. Thirring. Seems to answer my query in Sept. SS.

"The world's surface taken as a whole is a spherical surface of immense extension, and is studded with many small shallow humps, having the stars as their centres. The average distances between neighboring fixed stars are very small compared with the girth of the universe, and hence those parts of the world's surface between neighboring stars can be looked upon as almost plane."

Here is my report on Aug. TWS—Mr. Zytz (HOW do you pronounce it) Goes to Mars- 93'; Happy Ending- 90; The Devil of East Lupton, Vt. 85; The Ionian Cycle- 83 (better with love omitted); Regulations- 80; Climate-Incorporated- 70 (mushy); The Rotohouse—couldn't get interested in this one; Earth Men—a defeatist story—by an author with talent, who is selling his birthright for a mess of pottage.

It would be wonderful, if Bradbury used his art to raise the morale of humanity. Especially liked your answer to D. R. Smith. What happened to Michael this time? Would like to see a story in TWS by Raymond F. Jones. He wrote—The Children's Room, a real classic, beautiful Stf.

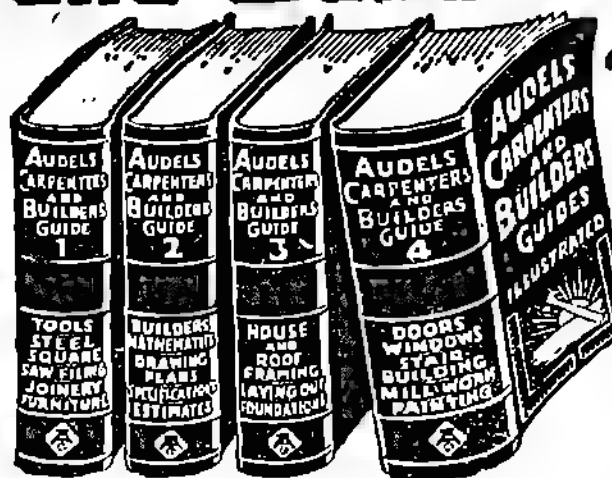
Something else in connection with above copy—"Minkowski showed that according to the special theory of relativity, space itself plays only the part of a shadow. Just as the shadow of a body is different in magnitude according to the surface on which it falls, so the space taken up by any object is different in size according to the state of motion of the system of reference from which it is seen. . . . As a surface is only a two-dimensional part of three-dimensional space, so space itself is not an independent whole, but only a three-dimensional part of the four-dimensional world (entire spacetime-entity)." I would sincerely appreciate a letter from some one, who is able to explain in simple language (no math. please) this "entire space-time-entity."—Uptown, Wyoming.

The space-time entity is simple enough in theory—although we don't wonder at your confusion, Mrs. Firestone, from the examples you cite. The entire basis of fourth-dimensional reasoning is based upon the very sound assumption that, to exist in space, an object must also exist in time as surely as it must have the inevitable three spatial dimensions.

Hence it is generally felt that time must be a dimension as valid as the three we can see and feel, even though it lies beyond the field of our senses. As for Bradbury and his defeatism we can only cite Abraham Lincoln

[Turn page]

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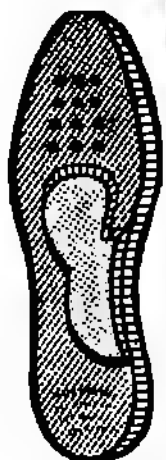
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on the subject of General Grant's well-known fondness for whiskey—if we had some of his pottage we'd like to give it to a number of our other authors.

WE THOUGHT THERE WERE TWO OF THEM

by L. Leon Shepherd

Dear Editor: Have just finished the lead novel, *Mr. Zytztz Goes to Mars*, by Noel Loomis. Think it is the best story I have read recently. As a matter of fact, it is so good I had to mention it before I started the beef that prompted this letter. Now that I have mentioned it, I will go on with my beef. Here it is—

How come our friend, Don Cox—Ed Cox, both of #4 Spring St., Lubec, Maine, is so omnipotent with his remarks, re; the April issue, that we are subjected to two letters, in the same issue, by said Cox, of two first names, and the same address?

Don't you have enough hopeful, and, I imagine, just as omnipotent fans to write you their views, on said issue? Or, did you slip up???? As a matter of fact, he said substantially the same thing in both letters, so one should have been skipped even if you didn't notice the similarity of address. The rest of the "Reader Speaks" was as usual—up to par, and as interesting as a second magazine. Maybe, even more so. I always read it first.

To give you an idea of the seriousness of your aforementioned "mistake": You should have some conception of how thrilled some of the fans are when they get a letter published in that dept. My friend and correspondent, Ila Workman of St. George, Utah, had a letter, for the first time, in the August issue, and was so thrilled she could hardly contain herself.

You could have made some other Fan happy with that space. . . . For instance, ME. I have been trying to make myself heard in TWS for months. Now Editor, don't look so hurt: You know everyone has a selfish motive. (Of which I shall say more later.) However, I am, at least, honest enough to admit mine.

Now, may I have some space to remark on theory that the type of stories—usually called classics, by fandom, run by magazines such as yours when they can get them, carry a message to mankind. If they would only heed them?

The lead novel this issue carries it to some extent. It touches upon the penalties that we pay for stubborn, narrow, entirely human and selfish stands we take upon a course of action that we probably, if we examine it closely, do not believe in ourselves. Yet we continue to uphold such stands, in our societies, our governments, our everyday lives, our business dealings and, where we shouldn't, especially in our Churches.

Some of the authors, Hamilton, Kuttner and Phillips, to name a few, do such a good job of getting such messages over; I think some portions of them should be sent to Congress to be read into the Record. However, if some of us should make so bold as to try it, we could really find out how Democratic??? our Government really is.

If it were to be mentioned at all, it would be considered the mouthings of some alleged "DREAMER". However, I insist, and most "new" readers of these particular types of stories agree with me, that "The writing is on the wall" if some of the alleged "dreamers" are not listened to.

Perhaps, the "dreamers" are not so busy getting rich that they have time to think. After all, Socrates, was considered a dreamer by many, yet people still know who he is, which is more than will be true of a lot of the alleged Big Wheels of today, two thousand years from now.—204 East Ryder St., Litchfield, Ill.

Very true—and if there is only one Cox and Cox is his prophet, we apologize to all concerned.

SQUIRREL FOOD IS RIGHT!

by Jim Goldfrank

Dear Ed: May I again compliment you on a swell issue? Everything is wonderful, but why can't you make the damsel on the cover PRETTY? And always

besieged by a group of wotzits; that's bad too? Why not a little variety? Make the dame the villain. After all, variety is the spice of Life (the mag).

Kuttner does it again!!! "Happy Ending" was the most original story in ages. Always glad to see a new twist.

No, I'm not going to do it! Darn it, I refuse to congratulate you on going bigger. As my friend said, "I'd like to see SS and TWS in the 15c size but monthly."

*So I'll end with this thought
Tho it's not very sad
To read Thrilling Wonder
You've got to be mad!*

Squirrel food that is.—1116 Fulton Street, Woodmere, N. Y.

*A girl as the villain
Effective can be
As was proved by one H. Rider
Haggard in "She."*

This is really the poet's corner this ish. How come? Everybody go crazy or something? Oh, well. . . .

AND HERE'S ANOTHER by Frances Keyser

Dear Ed: Regarding the August TWS: I have looked thru my synonyms for something to describe the issue, but I can't do any better than the Mag's title—Thrilling Wonder Stories! Very, Very good—*ab ovo usque ad mala*. (Don't pull any of this on me, I had to look it up!)

Mr. Z. was—aw shucks, I'm at a loss for adjectives. Anyway to use a very feminine one, delicious. The same applies to the Earth Men. In fact, all were good, The Roothouse coming last on the list. The Gregory stories took a beating toward the last. I'll take them in preference to Oona, myself.

The cover wasn't true to the story. An Avian should have come out of the egg instead of a burrower. And, is the expression on the girl's face supposed to show how she looked when she got her brilliant idea, or did she bust a strap?

Finlay's illos are always the best. Who did those for Memory and Mr. Z.? They are good, too.

TRS is, as usual, my first stop. I read it on the way home from the magazine stand. I'll bet some people wonder if I'm nuts. I stop and laugh every few minutes. I think I'll make a scrap book of the fenpo (fan poetry to you) and Edipo answers. Would make a good morale builder on a bad day!

Maybe I'm a little late to get into the Lovecraft argument, but after reading it pro and con for so long and not being able to recall having read any such (I don't remember authors very good, not unless they are drummed into me—like Captain Future!) I bought a pocket book edition of Lovecraft. My opinion—it's terrible—just like the foul things he wrote about!

Now here is something that worries me. Fantasy is fairy tales for grownups, no? Then why do I never see Thorne Smith mentioned. After all, I think he did some good fantasy. Or was he too ribald and therefore unmentionable? What is the average age of the fen anyway? There! That's off my chest, even if I did step off the deep end.

Here's my little scienotation for now. On a recent motor trip into Northern California, and during an all night driving session, I noticed that when motorists pulled off the road for that much-needed nap, far more parked under a tree than did in the open. Is this a not quite dead instinct to seek the shelter of the treetops in the dark of night? Check on this, fans, and verify it. And now, Dear Ed., I leave you with this tantalizing quatrain:

*I have built my castles in the air,
High in the fleecy clouds and azure blue—
Now I but stand and gaze at the beauty there
For I forgot to build a stairway too!*

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[Turn page]

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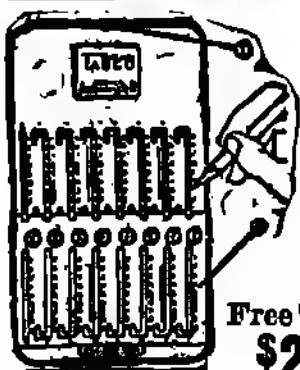
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Was an acrobat, one of the best
For he rowed ashore in a dinghy
And then sat down on his chest.

But now we can cheer Frances Keysor
As an intriguing concept occurs
Her chestacrobatics top Crusoe's
For she stepped off the deep end of hers.

What did you use, Frances—a trampoline?
And it does seem to us we've given a huzzah
or too to Thorne Smith in these columns.
Certainly we got a lot of laughs out of his
works—especially Night Life of the Gods. As
for your motorists—weren't they seeking tree
bottoms rather than tree tops? Sounds like
that old and tiresome quest for roots to us—
maybe a search for root beer.

COMES TIME

by Thomas Beck

Dear Editor: Since I've been reading TWS for over five years, I thought that it's about time that I wrote you a letter to "The Reader Speaks". I would like to start off by commenting on your new policy of Higher Prices. All I can say is that it never should have been done, mainly due to the fact that THRILLING WONDER STORIES and STARTLING STORIES have been, up 'til now, the best STF magazines for fifteen cents and, by raising the prices, you may have destroyed the faith and affection that your many followers have had for years.

As for me, I would continue buying both of my favorite mags, even if they were mimeographed. Of course, if raising the price means better stories and more illustrations, then I'M with you 100%, because the quality of the stories that have been printed up until a year ago was way below par compared with the material that is being published now.

Furthermore, if we are to have a longer reader's column, then let's have some letters that are capable and worthwhile reading instead of the inane drivel that sometimes seems to hit us like a plague and often lasts for several issues.

In reading a few issues back, I was actually surprised at The Reader Speaks for containing practically 100% per cent letters, letters that were worth reading, informative and kept, at least, this reader interested; now, it has gone back to its "Sergeant Saturn" routine again, which always reminds me of "Why Vaudeville Flopped".

It seems as if some letter writers seem to write nothing but "How nice the magazine looks" and "Keep up the good work with those stories" and "Why don't you trim the edges" AND "All the pictures were nice except the one on page 13, it looked as if the artist was drawing with his fist." A-N-D "Hey! Sarge, I have a poem, "Roses are red, violets are blue, but what does Bergey use for paint, Goo?"

It is such material that is ruining the letter columns of both TWS and SS, and the less we have of it, the better all normal minded readers will appreciate you and the company for which you are working. Of course, everybody likes good humor, but it should be in the right places and in the right proportion, and not carried to excess, unless some readers want a comic book instead of a publication of good contemporary literature.

Enough of that for now. I would like to ask you Why! OH! Why! you do not ever print letters from fans who like to swap Fantasy mags and books? You must undoubtedly realize that swapping is the acme of fandom today and if it had not been for swappers, the STF and fantasy world would not have been so great as it is today, and your two mags would not have been so well known; for there are parts of the English speaking world that do not have access to fantasy mags at all, and if it were not for the international system of correspondence amongst fans, they

would never be able to get the wonderful reading matter that we have here in the U. S.

I should like to be the first one to break the ICE by putting in a plug for myself. I am a swapper and I have loads of fantasy, and I am willing to trade as much of it as possible, and if I could, all of it. I have over 300 fantasy titles by Merritt, Burroughs, England, Victor Appleton, MacLure, Haggard and many others. All I am interested in swapping is for fantasy. There. I've said it and I am glad, even if you don't print my letter.—116 West 45th Street, New York 19, N.Y.

Okay, Thomas, we won't print it. As for humor, when did it ever appear in comic magazines? Are you trying to undermine the social structure, man?

We think you're a trifle unjust. We have run many swap pleas in this column and in its mate, The Ether Vibrates, in SS. In reprisal, we hope all your Burroughs grow Haggard.

MEET THE MRS.

by Mrs. Virginia Maglione

Dear Ed: This is my second fan letter. The first was written to your companion mag. S.S. It was written in longhand and I never got over the shock of seeing it printed. This will prove however that I read both mags. It will also prove that I can't type.

Because I neglected to state in the previous letter that I am a Mrs. I received some riotous letters from other fans, assuming I was all the way from 6 to 69. May I apologize herein for the error?

Despite ardent missionary work on my part, my husband remains unconverted to S. F. yarns. Since he is reasonable however about my enthusiasm over same I have no complaint.

I regret to say that fans in this area seem scarce. If it weren't for the fact that the mags. do disappear I would think that I alone read them.

Needless to say I rejoice to see the Fem. fans out in full force in the Aug. issue! Ray for same, to the bems with those who disagree!

And now THE AUG. ISSUE. The cover, oh well what's the use? The letters, I turn there first as do most. It's always good for a laugh or fight. But may I air a pet opinion? Those fans who are so quick to throw stones at the stories should try writing one themselves. I've tried and found it gives you a respect for other people's efforts. I never even got to the point where I thought the yarn was good enough to send. That does not mean you may or may not like a story on a personal basis.

I must confess however that I have read so much S.F. that it takes an unusual story to really fire my imagination. That's the trouble with S.F. fans, they're so used to the unusual that they yawn in the face of the latest inventions with a "yeah we've heard all about that."

Frankly Jeanette Marie Thomas's letter amazed me. I had gathered from the letters that nearly all active fandom were teenagers or very little removed!

And now at long last, the stories. Every single one was good but of the shorts I believe the Earth Men tops the list. With each one I have an urge to say, "If the others weren't so good this would have been best."

Happy Ending has a neat twist. The Devil of East Lupton reads like a classic anthology selection. One gripe tho, I'm very fond of M. St. Clair's work even that 25th century Claudia. Oona. Please let her do something different. I have read some of her straight S.F. and it's O.K. Oona and Jick are cute and you can always keep the fans asking for more, but you can't revive a series everyone is tired of!

Oh, oh—I see that blue pencil advancing so I'll finish. The novelets all pass with high marks. Mr. Zytztz was just dreamy, a really good lead novel with some nice sly digs at human ego—very justified too. Yes, yes I really am going now, expecting another swell issue next time.—Box 97, S. Acton, Mass.

We hope you get it, Virginia—and get your

[Turn page]



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YIPE! HERE'S ANOTHER!

by Daniel McCobb

Dear Ed:

After many years at last,
I write you, oh Sarge of the past
And though my rimes be somewhat odd,
I hope to give you a stiff prod.
Bergey, alas, with all his skill,
Is made to paint these horrors still.
Why must there be a shapely fem,
Frightened by a monster grim.
Oh, why must colors ever clash,
And titles make the cover hash.
Some of the tales in August number,
Would soon have one lost in slumber.
Mr. Leinster's plot's so old,
It leaves me very, very cold.
While Bradbury was just too slick,
In fact it made us slightly sick.
We simply cannot understand,
What others see in this odd man.
But don't think I don't like your mag,
It's just some things that make me gag.
Now Sturgeon marched afore the rest,
Though I can't see how plastic so pressed.
Loomis' idea seemed fairly good,
At any rate from where I stood.
He's very good at weaving plot,
And Steven's art helped quite a lot.
And while speaking of artist, friend,
Let's not see Napoli again.
I hope the tale by William Tenn,
Will start a brand new story trend.
No world savers or killers here,
For which I offer up a cheer.
But ere this rime I over do,
I think I'd best bid you adieu.
44-D-Clark Homes, Flagstaff, Arizona.

It's very well to criticize
And squawk and squeak in rhyme
But must you Ye Ed penalize
And do it all the time?

You'd have us no more save the world
Nor kill nor steal nor rob
In short, what you'd like us to run
Is strictly off McCobb.

FRESH OAR
by Bob Strickler

Dear Ed: May a newcomer to science-fiction put his oar in The Reader Speaks? Thanks, I shall proceed to do so. (Do I hear a groan?)

I'll start off by complimenting your stories. I've been reading THRILLING WONDER STORIES for over a year now and as far as I'm concerned, this was the

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best all-around ish I've ever read. As a matter of fact, I liked every story—even the St. Clair short. I think "Mr. Zytzy (whew!) Goes to Mars was best but "The Ionian Cycle" came in a very close second. Strange as it may seem, "Regulations," "Happy Ending" and "The Earth Men" all tied for third place.

Right here, I'd like to kick in a word or two about illustrations. I liked all of them except those on pages 9 and 15. With illos on that order appearing in STF mags so often, is it any wonder that so many of the older folks get the idea that STF is pure trash?

Switching over to the Reader Speaks, I'd like to say that the column you have strikes me as one of the finest points of the magazine. I always enjoy reading what other folks have to say about your stories and letters like that one from John Van Couvering really give me a buzz (It may be hack to you, Ed, but I love it.).

I was overjoyed to see Wigodsky get several well needed trouncings. The two Maine boys, Ed Cox and Russell Woodman, had two of the finest letters in the mag—I hope you keep it up, fellas. Jeannette Thomas has a really swell idea. You'll be hearing from me soon, keed.

I've been yawning long enough I guess so I'll take a powder. I will leave you with this consoling thought. If this is printed, I will write again—if not, I'll still write.—6719 Chestnut, Kansas City 5, Missouri.

Frankly, we don't know whether to feel consoled or not.

TOO LITTLE TIME

by Guerry Brown

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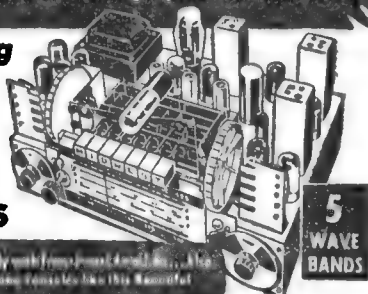
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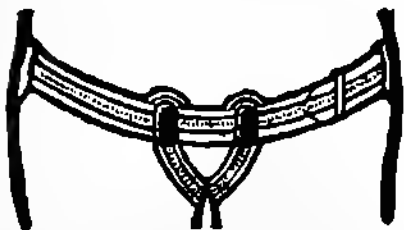
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magazine. Being away at a boarding school in Palm Beach was the factor which prevented me from doing so, as the work was laid on pretty quick and little time was left for even reading stf, let alone thinking up epistles myself. (Nicely implied comparison there; that my letter-writing requires about the same amount of thought and effort as does the authoring of your stories. Neat, eh?)

But school is done for the summer, the battered textbooks having been gently laid aside in the rubbish heap, and the haggard young mind being allowed to recuperate before plunging back into the storm and strife of next fall. So, I bought a copy of the August TWS, read it and decided upon a letter of comment after doing that. And here I am.

Firstly, the news of a further enlargement in size (and price) is gratifying in the extreme, at least for the former. Perhaps the change in format can include nice trimmed edges?

Your editorial was well-put, but it isn't the whole works. I don't think you intended it as such, to cover all the things people should keep in mind if they intend to shoot to the planets, but even so that's only the background. Motivations and desires derived from a belief, and others supplementary to it have to be applied. Faith should be in the background, not yelling and stomping out in front where it is ridiculous.

The stories this issue ranged in quality from extremely poor to extremely good. Filling the first category is your main story, "Mr. Zytztz Goes to Mars". That you could even consider accepting such a story surprises me. I thought you had better literary sense than that! The writing, the plot, the accompanying illustrations were all rotten. Loomis tried to put in clever satire and a touch of pathos here and there and didn't even begin to get anywhere. Never print another one like this, please!

"Regulations" was okay, ordinary stuff. "Happy Ending" pleased me very much. The novel way of telling the story, the slick clear style and a fine plot all combined to make it one of the best in the issue. The characters of Kelvin and the Robot were especially good. A really swell little tale.

"Memory" was good, except for the last two paragraphs. I don't quite grasp the significance of Phyllis' becoming a window-washer. It seems to me to be a singularly inappropriate choice of an occupation for a woman to work out her life in noble selflessness in—if you follow me.

"The Earth Men"—wonderful! Best story in the mag. Bradbury is in a class by himself, as many others have said before, with an originality and freshness of style that throws him ahead of other writers. This is no news to you, I'm sure. The story

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was a wonderful little piece of satire. The last two sentences really provided the kick. A jewel of prose, no less, if you'll excuse the effluence. "Climate"—fairly good, not too original.

"The Devil of East Lupton, Vermont" was a good short, well done and enjoyable. "The Ionian Cycle"—fair. "The Rotolhouse"—pretty good. Artwork was mediocre throughout, nowhere being as good as it could have been. Cover especially bad. And let me second Mr. Oliver's remarks concerning the lead illustration, which has not been in the best taste lately. Maybe you like those kinds of pics, but that doesn't necessarily mean that your readers subscribe to the same views. You can get all the pics of that kind you like at the corner newsstand.

I was going to say that the Reader Speaks Department wasn't so hot but looking through it revealed to me that I hadn't even read most of it. I say now that it is a good one, what with Oliver, Ebey, Van Couvering, and assorted others made a very nice selection, although there were a number of crummy ones. The majority were readable and amusing, however.—P. O. Box #1467, Delray Beach, Florida.

Which brings us to end of the line in the present space-time continuum. Not a bad bunch of letters at all, despite the poetry that makes us sweat out those replies. Well, don't think up too many tough ones all at once for the next round in this battle. So long until the bell sounds again.

—THE EDITOR.

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The FRYING PAN



A REVIEW OF FANZINES

THE self-built-in and interlocking mail-boxes known chiefly to one another as the SAPS (some mountainous intellect or group of same labored long and loudly to produce something called Spectator Amateur Press Society with the above initials) constitute a truly remarkable body of no-pay publishers.

Most of the work is keyed to a light level—at any rate it is supposed to be. Of course there are always a few leftovers from the immortal F. P. A.'s long-gone creation, Dulcinea and her group of serious thinkers, whom Messrs. Kaufman and Connolley marketed successfully on Broadway some 26 years ago under the title of "Dulcy" and with assists from Lynne Fontanne and Alfred Lunt.

These heavyweights go into their sermons at the drop of an India paper Bible page and bray merrily against totalitarianism and the atom bomb and the inevitable dreary like—but fortunately they are in a very small minority. Most of the SAPS are out for a jolly old time and the devil take the hindmost.

One Con Pederson of 705 West Kelso, Inglewood, California, really works at it. His little brochure is entitled SNARL and subtitled "The Mag with an Inferiority Complex." Page 2 reveals why, leaving the reader in no suspense.

There a poem by Walt Davis begins (no kidding) with—

*"Four and twenty spaceships
Coming down to Earth. . ."*

—and is followed by something called “Who Knocks” by Delbert Grant that goes, in part—

“Who knocks? Who knocks upon the wooden door?

Who knocks as if for evermore?

Who knocks?

“Who knocks. . .”

—but by this time you should have the idea. A knockout in the most complete sense of the word. Yes, SNARL has a right to its inferiority complex. Another issue like the last and it will have a right to a persecution complex.

More SAPSines

However, Henry M. Spelman III of 75 Sparks Street, Cambridge 38, Massachusetts, who puts out a SAPSine entitled NAMLEPS (no, we don't know what it means either) tops the Pederson entry with the subtitle—“The Sapsine that were better dead.” And, to our mild surprise, we took only a brief time to discover that perhaps Mr. Spelman was not kidding at all.

FROZINE, another SAPS item exposed by Phil Froeder of 448 Demarest Avenue, Closter, New Jersey, carried the attack right into this editor's front yard via a peck of pentameter by Joe Schaumburger entitled JOBBERWIGGLE.

It goes like this—

*’Twas Thrilling and the slimy covers
Did bounce and wriggle on the stands
The female of a pair of lovers
Tried to escape the Monster's hands.*

*The hero's vortex gun in hand
The hero's face so grimly set
(Obeying some unseen command
Or possibly to win a bet).*

*Note well his firm determined look
How calm he contemplates the gore
(Only a cover on a book
And frozen thus forevermore).*

No comment.

Paging Diogenes

Frankness, of course, is one of the great virtues of amateur publishing—heck, they can afford it! For instance, Earl Dodge of 680 Duke Street, Northumberland, Pennsylvania, who puts out something called

[Turn page]

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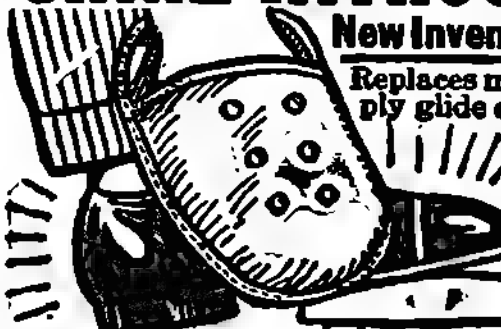
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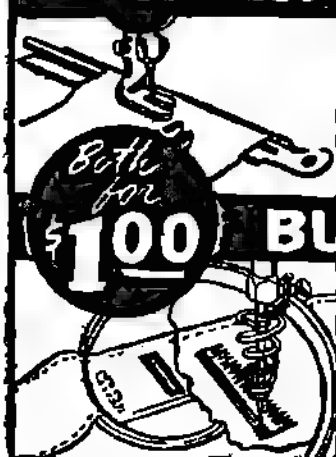
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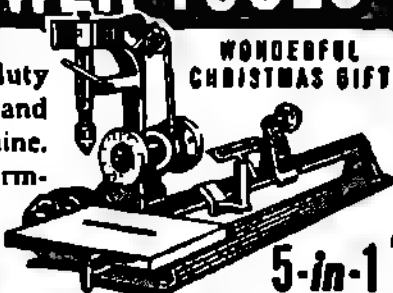
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SCYLLA, says to his readers, after stating that his 'zine costs 15c, "You're foolish if you order more than one in advance, however (That is, right now). Later, perhaps, we can be more certain of matters."

If you had lived in the time of Diogenes, Earl, he could have crawled back into his butter churn or whatever it was he solved the housing shortage in a lot sooner than he did. Bless you, fellow, for the chuckle of the month.

Walter A. Coslet (Coswal) of P.O. Box No. 6, Helena, Montana, comes up with a strictly involuntary giggle in his "thing" called SNIX, while advertising his mimeograph service for ambitious fanzineers. Says he, in small capitals—

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It is to our way of thinking that Mr. Coslet had better get some ink which won't run even on one side of the paper.

Final absurdity this time comes from the Editor's Page of the modestly entitled **UNIVERSE**, a fanzine recently inaugurated by Ray Nelson of 433 East Chapin Street, Cadillac, Michigan. In the course of soliciting for material he says—

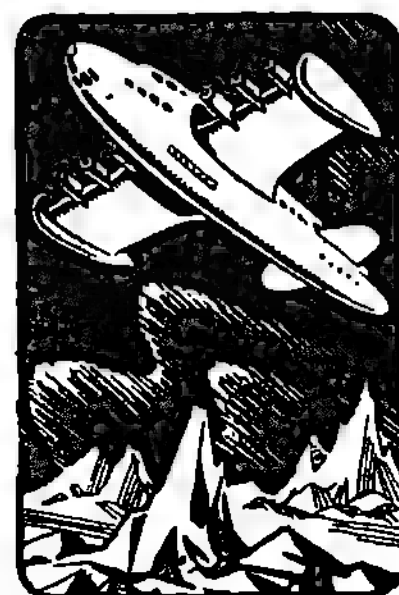
"What kind of material does this mag want? Anything at all. It doesn't have to be science fiction or fantasy or weird, tho that helps. All it has to be is new and original."

Oh, brother! that's all!

—THE EDITOR.

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SCIENCE FICTION BOOK REVIEW

THE CHECKLIST OF FANTASTIC LITERATURE,
Edited by Everett F. Bleiler, Shasta Publishers, Chi-
cago, Illinois (\$6.00).

Those frivolous readers of science fiction who care only for the excitement of reading without further consideration, who are content to purchase current issues as they come out (mind you, we're on their side) and whose only concern is whether or not the space-traveling hero rescues the Bem-



trapped wench from foul captivity, won't get much out of the CHECKLIST.

But those who delve deeper into fantasy, who wish to discover its origins, the work of its early masters and its masterpieces which have won for themselves an enduring place in the sphere of literature as well as popular esteem, will find it well worth the somewhat inflationary price. Naturally, it is a must for collectors.

From Dean Jonathan Swift and Adam Seaborn, whose "Symmzonias; a Voyage of Discovery" under the pseudonym of John C. Symmes stirred up a considerable ruckus in 1820, to the modern "Mr. Adam" of Pat Frank, the CHECKLIST has just about every author and book title of any import in the history of Anglo-American fantasy and science fiction.

Furthermore, its 452 pages contain not only lists of works by authors but by titles, thus making it easy to find just about anything from A. E. to L. Zugsmith or, by titles, from "!!!" by George Hepworth to "Zoroaster" by F. Marion Crawford.

Preface and introduction by Editor Bleiler, well-integrated appendix notes which should prove fascinating to browsers and biblio-

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philes and a sort of CHECKLIST checklist of Critical and Historical Reference Works complete the edition. Considering the work that must have gone into this exhaustive compilation, all we can say is, "Whew!"

THE BLACK WHEEL, by A. Merritt, completed and illustrated by Hannes Bok. New Collectors' Group, New York (\$3.00).

Once again, as in the case of **THE BLUE PAGODA**, Mr. Bok has taken an unfinished posthumous novel by the late great fantasist, A. Merritt, and has equipped it with a mid-section and a finale as well as with a number of his inimitable lithographic drawings.

Taken all in all it seems to us that Mr. Bok has done a better job than he managed to do with **PAGODA** but that his basic material was a bit weaker. For this story of weird ancestral possession, operating through a mysterious pilot wheel taken from a long-since-wrecked slaver that came to grief on a West Indian island, is so fantastic that it stretches credibility close to the snapping point.

Thus we have a millionaire descendant of the old slaver captain (or is he a reincarnation of that somewhat unpleasant personality?) becoming thoroughly possessed once he comes into possession of the wheel with its carved human hands. There are zombie-ish creatures living in caves on the rim of a lagoon to which his yacht is storm driven, a ghost ship and legends of ancient African magic which come inexplicably real.

Probably, if it suffers at all, the book is

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afflicted by a plethora of eerie happenings, so many in fact and so completely delved into that the repetition of mood tends to weaken them individually and as a whole. And nowhere is the characterization developed to a point where the reader can actually associate himself with any of the persons on the pages before him and care about their fates.

However, the book is an entertaining oddity for the most part and—especially if read at a couple of sessions instead of straight through—offers a sufficiency of gooseflesh for wary and unwary alike. We do wish, however, that it had been set in larger type. As it is the operation of reading it is a bit hard on the eyes—more so than on the nerves.

Next Issue's Headliners!



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